



Astrodienst Ephemeris Tables for the year 2089

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 2089
geocentric

JANUARY 2089

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 45 35	11°31'24	6°41	16°R59	28°12	21°R59	13°12	20°R49	5°3	22°R46	21°R28	24°R12	23°39	14°346	27°R25	S 1
S 2	6 49 31	12°18'32	20°42	15°344	29° 8	21°1251	13°39	20°347	5° 6	22°1245	21°128	24° 8	23°36	14°52	27°122	S 2
M 3	6 53 28	13°19'41	4°14	14°25	0°4	21°43	13°48	20°45	5° 8	22°44	21°28	24° 6	23°33	14°59	27°18	M 3
T 4	6 57 24	14°20'50	17°19	13° 3	0°59	21°33	13°58	20°43	5°10	22°43	21°D28	24° 6	23°30	15° 6	27°14	T 4
W 5	7 1 21	15°21'59	0°11	11°43	1°53	21°23	14° 7	20°41	5°13	22°42	21°28	24° 6	23°27	15°13	27°11	W 5
T 6	7 5 17	16°23'08	12°25	10°26	2°46	21°11	14°16	20°39	5°15	22°40	21°28	24° 5	23°23	15°19	27° 7	T 6
F 7	7 9 14	17°24'18	24°36	9°14	3°39	20°59	14°25	20°38	5°18	22°39	21°28	24° 2	23°20	15°26	27° 4	F 7
S 8	7 13 10	18°25'28	6°38	8°10	4°32	20°46	14°34	20°36	5°21	22°38	21°28	23°56	23°17	15°33	27° 0	S 8
S 9	7 17 7	19°26'38	18°34	7°15	5°23	20°33	14°43	20°35	5°23	22°36	21°28	23°46	23°14	15°40	26°57	S 9
M10	7 21 4	20°27'47	0°36	6°29	6°14	20°18	14°51	20°34	5°26	22°35	21°28	23°34	23°11	15°46	26°53	M10
T 11	7 25 0	21°28'57	12°18	5°53	7° 4	20° 3	15° 0	20°33	5°29	22°34	21°28	23°20	23° 7	15°53	26°50	T 11
W12	7 28 57	22°30'06	24°10	5°27	7°53	19°47	15° 8	20°31	5°31	22°32	21°29	23° 4	23° 4	16° 0	26°47	W12
T 13	7 32 53	23°31'15	6°4	5°11	8°41	19°30	15°16	20°31	5°34	22°31	21°29	22°49	23° 1	16° 6	26°43	T 13
F 14	7 36 50	24°32'24	18° 1	5°D 4	9°28	19°13	15°25	20°30	5°37	22°29	21°29	22°35	22°58	16°13	26°40	F 14
S 15	7 40 46	25°33'32	0°3	5° 6	10°15	18°55	15°33	20°29	5°40	22°28	21°29	22°24	22°55	16°20	26°37	S 15
S 16	7 44 43	26°34'40	12°10	5°16	11° 0	18°36	15°41	20°28	5°42	22°26	21°30	22°15	22°52	16°27	26°34	S 16
M17	7 48 39	27°35'47	24°26	5°33	11°45	18°17	15°48	20°28	5°45	22°25	21°30	22°10	22°48	16°33	26°31	M17
T 18	7 52 36	28°36'53	6°56	5°57	12°28	17°57	15°56	20°28	5°48	22°24	21°30	22° 8	22°45	16°40	26°28	T 18
W19	7 56 33	29°37'58	19°41	6°28	13°10	17°37	16° 3	20°27	5°51	22°22	21°30	22°D 7	22°42	16°47	26°25	W19
T 20	8 0 29	0°39'03	2°47	7° 4	13°51	17°16	16°11	20°27	5°54	22°20	21°31	22°R 7	22°39	16°53	26°22	T 20
F 21	8 4 26	1°40'06	16°18	7°45	14°31	16°54	16°18	20°D27	5°57	22°19	21°31	22° 6	22°36	17° 0	26°19	F 21
S 22	8 8 22	2°41'09	0°15	8°30	15° 9	16°32	16°25	20°27	6° 0	22°17	21°32	22° 4	22°33	17° 7	26°16	S 22
S 23	8 12 19	3°42'11	14°40	9°20	15°47	16°10	16°32	20°27	6° 3	22°16	21°32	21°59	22°29	17°14	26°13	S 23
M24	8 16 15	4°43'12	29°30	10°14	16°22	15°47	16°39	20°28	6° 6	22°14	21°32	21°51	22°26	17°20	26°11	M24
T 25	8 20 12	5°44'12	14°39	11°11	16°57	15°24	16°45	20°28	6° 9	22°13	21°33	21°41	22°23	17°27	26° 8	T 25
W26	8 24 8	6°45'11	29°57	12°11	17°30	15° 1	16°52	20°29	6°12	22°11	21°33	21°30	22°20	17°34	26° 5	W26
T 27	8 28 5	7°46'09	15°13	13°14	18° 1	14°38	16°58	20°29	6°15	22° 9	21°34	21°19	22°17	17°41	26° 3	T 27
F 28	8 32 2	8°47'06	0°16	14°19	18°31	14°14	17° 4	20°30	6°19	22° 8	21°34	21°10	22°13	17°47	26° 0	F 28
S 29	8 35 58	9°48'03	14°56	15°26	18°59	13°50	17°10	20°31	6°22	22° 6	21°35	21° 3	22°10	17°54	25°58	S 29
S 30	8 39 55	10°48'58	29° 9	16°36	19°26	13°26	17°16	20°32	6°25	22° 5	21°35	20°58	22° 7	18° 1	25°56	S 30
M31	8 43 51	11°49'53	12°51	17°38	19°50	13°12	17°12	20°33	6°28	22°12	21°36	20°56	22° 4	18°3	25°53	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	22s57	5n36	3s43	20s23	1n59	13s 0	0s58	17n42	3n44	14s50	1n 6	15n44	2s18	10s21	0s45	14n11
S 2	22 51	1 7	2 47	20 14	2 16	12 35	0 52	17 47	3 46	14 52	1 6	15 44	2 17	10 20	0 45	14 11
M 3	22 46	3s15	1 43	20 7	2 32	12 9	0 46	17 52	3 48	14 55	1 6	15 44	2 17	10 19	0 45	14 11
T 4	22 39	7 21	0 36	20 2	2 46	11 44	0 39	17 57	3 51	14 58	1 6	15 43	2 17	10 18	0 45	14 12
W 5	22 32	10 59	0n31	19 58	2 57	11 18	0 33	18 3	3 53	15 0	1 6	15 43	2 16	10 17	0 45	14 12
T 6	22 25	14 3	1 35	19 55	3 6	10 53	0 26	18 9	3 56	15 3	1 7	15 43	2 16	10 16	0 45	14 13
F 7	22 18	16 25	2 34	19 54	3 13	10 27	0 19	18 15	3 58	15 6	1 7	15 43	2 16	10 15	0 45	14 13
S 8	22 10	18 3	3 24	19 54	3 17	10 1	0 11	18 21	4 0	15 8	1 7	15 43	2 16	10 14	0 45	14 14
S 9	22 1	18 51	4 5	19 56	3 18	9 35	0 4	18 28	4 2	15 10	1 7	15 43	2 15	10 13	0 45	14 14
M10	21 52	18 50	4 36	19 58	3 18	9 10	0n 4	18 34	4 5	15 13	1 7	15 43	2 15	10 12	0 45	14 14
T 11	21 43	17 59	4 54	20 2	3 15	8 44	0 12	18 41	4 7	15 15	1 7	15 43	2 15	10 11	0 45	14 15
W12	21 33	16 21	4 59	20 8	3 11	8 18	0 20	18 48	4 9	15 18	1 7	15 43	2 14	10 10	0 44	14 15
T 13	21 23	14 2	4 51	20 14	3 6	7 53	0 28	18 56	4 11	15 20	1 8	15 43	2 14	10 9	0 44	14 16
F 14	21 12	11 7	4 31	20 20	2 59	7 27	0 37	19 3	4 13	15 22	1 8	15 43	2 14	10 8	0 44	14 16
S 15	21 1	7 44	3 58	20 28	2 52	7 1	0 45	19 10	4 15	15 24	1 8	15 43	2 14	10 7	0 44	14 17
S 16	20 50	4 0	3 14	20 36	2 44	6 36	0 54	19 18	4 16	15 26	1 8	15 43	2 13	10 6	0 44	14 17
M17	20 38	0 3	2 21	20 44	2 35	6 11	1 3	19 26	4 18	15 28	1 8	15 43	2 13	10 5	0 44	14 18
T 18	20 26	3n58	1 19	20 52	2 25	5 46	1 13	19 34	4 20	15 31	1 8	15 43	2 13	10 4	0 44	14 18
W19	20 13	7 54	0 13	21 0	2 16	5 21	1 22	19 41	4 21	15 33	1 8	15 43	2 12	10 3	0 44	14 19
T 20	20 0	11 33	0s56	21 9	2 6	4 56	1 32	19 49	4 23	15 34	1 9	15 44	2 12	10 2	0 44	14 19
F 21	19 47	14 43	2 4	21 16	1 56	4 32	1 42	19 57	4 24	15 36	1 9	15 44	2 12	10 1	0 44	14 20
S 22	19 33	17 9	3 7	21 24	1 46	4 7	1 52	20 5	4 25	15 38	1 9	15 44	2 12	9 59	0 44	14 20
S 23	19 19	18 34	4 0	21 31	1 35	3 43	2 3	20 13	4 27	15 40	1 9	15 45	2 11	9 58	0 44	14 21
M24	19 4	18 47	4 39	21 37	1 25	3 20	2 13	20 21	4 28	15 42	1 9	15 45	2 11	9 57	0 44	14 21
T 25	18 50	17 40	4 59	21 42	1 35	2 56	2 24	20 29	4 29	15 44	1 9	15 45	2 11	9 56	0 44	14 22
W26	18 34	15 18	4 58	21 47	1 5	2 33	2 35	20 37	4 30	15 45	1 9	15 46	2 10	9 55	0 44	14 22
T 27	18 19	11 52	4 36	21 51	0 55	2 11	2 46	20 45	4 30	15 47	1 10	15 46	2 10	9 54	0 44	14 23
F 28	18 3	7 43	3 54	21 54	0 46	1 49	2 58	20 52	4 31	15 49	1 10	15 47	2 10	9 53	0 44	14 24
S 29	17 47	3 11	2 59	21 56	0 36	1 27	3 9	21 0	4 32	15 50	1 10	15 47	2 10	9 51	0 44	14 24
S 30	17 31	1s23	1 53	21 57	0 27	1 6	3 21	21 7	4 32	15 52	1 10	15 48	2 9	9 50	0 44	14 25
M31	17s14	5s44	0s43	21s57	0n18	0s45	3n33	21n15	4n32	15s53	1n10	15n48	2s 9	9s49	0s44	14n25

Julian Day Number = 2484052.5, Delta T = 88.33 sec
Ecliptic obliquity = 23°25'31, Nutation = 0°00'08, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 25°59'02, Lahiri = 25°06'02

ASTRODIENST EPHEMERIS for the year 2089

geocentric

FEBRUARY 2089

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 47 48	12 ⁵⁰ 48	26 ⁴ 4	19 ³ 1	20 ¹ 13	12 ^R 38	17 ^M 28	20 ³ 34	6 ¹ 31	22 ^R 1	21 ^Y 37	20 ^D 56	22 ⁴ 1	18 ³ 14	25 ^R 51	T 1
W 2	8 51 44	13 ⁵¹ 41	8 ^M 52	20 ¹⁶	20 ³⁴	12 ¹⁴	17 ³³	20 ³⁵	6 ³⁵	22 ⁰	21 ³⁷	20 ^R 57	21 ⁵⁸	18 ²¹	25 ^{II} 49	W 2
T 3	8 55 41	14 ⁵² 34	21 ¹⁸	21 ³³	20 ⁵³	11 ⁵⁰	17 ³⁸	20 ³⁷	6 ³⁸	21 ⁵⁸	21 ³⁸	20 ⁵⁷	21 ⁵⁴	18 ²⁸	25 ⁴⁷	T 3
F 4	8 59 37	15 ⁵³ 26	3 ¹ 29	22 ⁵¹	21 ¹⁰	11 ²⁶	17 ⁴³	20 ³⁸	6 ⁴¹	21 ⁵⁶	21 ³⁹	20 ⁵⁵	21 ⁵¹	18 ³⁴	25 ⁴⁵	F 4
S 5	9 3 34	16 ⁵⁴ 17	15 ²⁹	24 ¹⁰	21 ²⁵	11 ³	17 ⁴⁸	20 ⁴⁰	6 ⁴⁴	21 ⁵⁵	21 ³⁹	20 ⁵¹	21 ⁴⁸	18 ⁴¹	25 ⁴³	S 5
S 6	9 7 31	17 ⁵⁵ 08	27 ²²	25 ³¹	21 ³⁸	10 ³⁹	17 ⁵³	20 ⁴²	6 ⁴⁸	21 ⁵³	21 ⁴⁰	20 ⁴⁴	21 ⁴⁵	18 ⁴⁸	25 ⁴¹	S 6
M 7	9 11 27	18 ⁵⁵ 57	9 ³ 12	26 ⁵³	21 ⁴⁹	10 ¹⁶	17 ⁵⁸	20 ⁴⁴	6 ⁵¹	21 ⁵¹	21 ⁴¹	20 ³⁵	21 ⁴²	18 ⁵⁴	25 ³⁹	M 7
T 8	9 15 24	19 ⁵⁶ 45	21 ³	28 ¹⁶	21 ⁵⁷	9 ⁵³	18 ²	20 ⁴⁶	6 ⁵⁴	21 ⁴⁹	21 ⁴¹	20 ²⁴	21 ³⁸	19 ¹	25 ³⁸	T 8
W 9	9 19 20	20 ⁵⁷ 33	2 ⁵⁷	29 ⁴⁰	22 ³	9 ³¹	18 ⁶	20 ⁴⁸	6 ⁵⁸	21 ⁴⁸	21 ⁴²	20 ¹²	21 ³⁵	19 ⁸	25 ³⁶	W 9
T 10	9 23 17	21 ⁵⁸ 19	14 ⁵⁶	1 ⁵	22 ⁷	9 ⁹	18 ¹¹	20 ⁵⁰	7 ¹	21 ⁴⁶	21 ⁴³	20 ⁰	21 ³²	19 ¹⁵	25 ³⁴	T 10
F 11	9 27 13	22 ⁵⁹ 03	27 ¹	2 ³¹	22 ^R 8	8 ⁴⁷	18 ¹⁴	20 ⁵²	7 ⁴	21 ⁴⁴	21 ⁴⁴	19 ⁴⁹	21 ²⁹	19 ²¹	25 ³³	F 11
S 12	9 31 10	23 ⁵⁹ 47	9 ¹ 13	3 ⁵⁸	22 ⁷	8 ²⁶	18 ¹⁸	20 ⁵⁵	7 ⁸	21 ⁴³	21 ⁴⁵	19 ⁴⁰	21 ²⁶	19 ²⁸	25 ³²	S 12
S 13	9 35 6	25 ⁰ 29	21 ³²	5 ²⁶	22 ³	8 ⁵	18 ²²	20 ⁵⁷	7 ¹¹	21 ⁴¹	21 ⁴⁵	19 ³⁴	21 ²³	19 ³⁵	25 ³⁰	S 13
M14	9 39 3	26 ¹ 09	4 ^Y 2	6 ⁵⁵	21 ⁵⁷	7 ⁴⁵	18 ²⁵	21 ⁰	7 ¹⁵	21 ³⁹	21 ⁴⁶	19 ³⁰	21 ¹⁹	19 ⁴²	25 ²⁹	M14
T 15	9 43 0	27 ¹ 48	16 ⁴²	8 ²⁵	21 ⁴⁸	7 ²⁵	18 ²⁸	21 ³	7 ¹⁸	21 ³⁸	21 ⁴⁷	19 ^D 29	21 ¹⁶	19 ⁴⁸	25 ²⁸	T 15
W16	9 46 56	28 ² 25	29 ³⁵	9 ⁵⁶	21 ³⁷	7 ⁶	18 ³¹	21 ⁵	7 ²¹	21 ³⁶	21 ⁴⁸	19 ²⁹	21 ¹³	19 ⁵⁵	25 ²⁷	W16
T 17	9 50 53	29 ³ 01	12 ⁴ 45	11 ²⁸	21 ²³	6 ⁴⁸	18 ³⁴	21 ⁸	7 ²⁵	21 ³⁴	21 ⁴⁹	19 ³⁰	21 ¹⁰	20 ²	25 ²⁶	T 17
F 18	9 54 49	0 ¹ 13	26 ¹³	13 ¹	21 ⁷	6 ³⁰	18 ³⁷	21 ¹¹	7 ²⁸	21 ³³	21 ⁵⁰	19 ^R 31	21 ⁷	20 ⁸	25 ²⁵	F 18
S 19	9 58 46	1 ⁴ 06	10 ^{II} 2	14 ³⁴	20 ⁴⁸	6 ¹³	18 ³⁹	21 ¹⁴	7 ³²	21 ³¹	21 ⁵¹	19 ³¹	21 ⁴	20 ¹⁵	25 ²⁴	S 19
S 20	10 2 42	2 ⁴ 37	24 ¹²	16 ⁹	20 ²⁷	5 ⁵⁷	18 ⁴²	21 ¹⁸	7 ³⁵	21 ²⁹	21 ⁵²	19 ²⁸	21 ⁰	20 ²²	25 ²³	S 20
M21	10 6 39	3 ⁵ 05	8 ⁴ 41	17 ⁴⁴	20 ⁴	5 ⁴¹	18 ⁴⁴	21 ²¹	7 ³⁹	21 ²⁸	21 ⁵³	19 ²⁴	20 ⁵⁷	20 ²⁹	25 ²³	M21
T 22	10 10 35	4 ⁵ 31	23 ²⁸	19 ²¹	19 ³⁸	5 ²⁶	18 ⁴⁶	21 ²⁴	7 ⁴²	21 ²⁶	21 ⁵⁴	19 ¹⁸	20 ⁵⁴	20 ³⁵	25 ²²	T 22
W23	10 14 32	5 ⁵ 56	8 ¹ 24	20 ⁵⁸	19 ¹⁰	5 ¹²	18 ⁴⁸	21 ²⁸	7 ⁴⁵	21 ²⁴	21 ⁵⁵	19 ¹²	20 ⁵¹	20 ⁴²	25 ²¹	W23
T 24	10 18 29	6 ⁶ 19	23 ²²	22 ³⁶	18 ⁴¹	4 ⁵⁹	18 ⁴⁹	21 ³²	7 ⁴⁹	21 ²³	21 ⁵⁶	19 ⁵	20 ⁴⁸	20 ⁴⁹	25 ²¹	T 24
F 25	10 22 25	7 ⁶ 40	8 ¹ 12	24 ¹⁶	18 ⁹	4 ⁴⁶	18 ⁵¹	21 ³⁵	7 ⁵²	21 ²¹	21 ⁵⁷	18 ⁵⁹	20 ⁴⁴	20 ⁵⁶	25 ²¹	F 25
S 26	10 26 22	8 ⁶ 59	22 ⁴⁶	25 ⁵⁶	17 ³⁶	4 ³⁴	18 ⁵²	21 ³⁹	7 ⁵⁶	21 ²⁰	21 ⁵⁸	18 ⁵⁴	20 ⁴¹	21 ²	25 ²⁰	S 26
S 27	10 30 18	9 ⁷ 17	6 ⁴ 58	27 ³⁷	17 ²	4 ²³	18 ⁵³	21 ⁴³	7 ⁵⁹	21 ¹⁸	21 ⁵⁹	18 ⁵²	20 ³⁸	21 ⁹	25 ²⁰	S 27
M28	10 34 15	10 ¹ 13	20 ⁴ 44	29 ¹ 19	16 ¹ 27	4 ¹ 13	18 ⁵⁴	21 ⁴⁷	8 ¹ 3	21 ¹ 16	22 ^Y 0	18 ^D 51	20 ⁴ 35	21 ³ 16	25 ^{II} 20	M28

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	16s57	9s38	0n27	21s56	0n 9	0s25	3n45	21n22	4n33	15s54	1n10	15n49	2s 9	9s48	0s44	14n26
W 2	16 39	12 58	1 34	21 54	0s 0	0 6	3 57	21 29	4 33	15 56	1 11	15 49	2 8	9 47	0 44	14 26
T 3	16 22	15 36	2 34	21 51	0 9	0n13	4 10	21 36	4 33	15 57	1 11	15 50	2 8	9 45	0 44	14 27
F 4	16 4	17 28	3 26	21 46	0 17	0 31	4 22	21 42	4 33	15 58	1 11	15 51	2 8	9 44	0 44	14 27
S 5	15 46	18 31	4 8	21 41	0 25	0 49	4 35	21 49	4 33	16 0	1 11	15 52	2 8	9 43	0 44	14 28
S 6	15 27	18 45	4 39	21 34	0 33	1 6	4 48	21 55	4 32	16 1	1 11	15 52	2 7	9 42	0 44	14 28
M 7	15 8	18 10	4 57	21 26	0 40	1 22	5 1	22 1	4 32	16 2	1 11	15 53	2 7	9 40	0 44	14 29
T 8	14 49	16 47	5 3	21 17	0 48	1 37	5 14	22 7	4 31	16 3	1 12	15 54	2 7	9 39	0 44	14 30
W 9	14 30	14 41	4 56	21 6	0 55	1 51	5 26	22 12	4 31	16 4	1 12	15 55	2 6	9 38	0 44	14 30
T 10	14 11	11 57	4 36	20 54	1 2	2 4	5 39	22 18	4 30	16 5	1 12	15 55	2 6	9 37	0 44	14 31
F 11	13 51	8 42	4 3	20 41	1 8	2 17	5 52	22 23	4 29	16 6	1 12	15 56	2 6	9 35	0 44	14 31
S 12	13 31	5 3	3 18	20 27	1 14	2 28	6 5	22 28	4 28	16 7	1 12	15 57	2 6	9 34	0 44	14 32
S 13	13 11	1 9	2 24	20 12	1 20	2 38	6 18	22 32	4 27	16 7	1 12	15 58	2 5	9 33	0 44	14 32
M14	12 50	2n51	1 22	19 55	1 26	2 47	6 30	22 36	4 26	16 8	1 13	15 59	2 5	9 32	0 44	14 33
T 15	12 30	6 47	0 15	19 37	1 31	2 55	6 43	22 40	4 25	16 9	1 13	16 0	2 5	9 30	0 44	14 33
W16	12 9	10 29	0s54	19 17	1 36	3 2	6 55	22 44	4 24	16 10	1 13	16 1	2 4	9 29	0 44	14 34
T 17	11 48	13 43	2 2	18 57	1 41	3 7	7 6	22 47	4 22	16 10	1 13	16 2	2 4	9 28	0 44	14 35
F 18	11 27	16 18	3 5	18 35	1 45	3 11	7 18	22 51	4 21	16 11	1 13	16 3	2 4	9 27	0 44	14 35
S 19	11 5	18 1	3 58	18 11	1 49	3 14	7 29	22 54	4 19	16 11	1 13	16 4	2 4	9 25	0 44	14 36
S 20	10 44	18 39	4 39	17 47	1 53	3 16	7 39	22 56	4 18	16 12	1 14	16 5	2 3	9 24	0 44	14 36
M21	10 22	18 6	5 3	17 21	1 56	3 16	7 49	22 59	4 16	16 12	1 14	16 7	2 3	9 23	0 44	14 37
T 22	10 0	16 20	5 7	16 54	1 59	3 15	7 59	23 1	4 15	16 13	1 14	16 8	2 3	9 21	0 44	14 37
W23	9 38	13 28	4 51	16 25	2 2	3 12	8 8	23 2	4 13	16 13	1 14	16 9	2 2	9 20	0 44	14 38
T 24	9 16	9 42	4 15	15 55	2 4	3 8	8 16	23 4	4 11	16 13	1 14	16 10	2 2	9 19	0 44	14 38
F 25	8 54	5 22	3 22	15 24	2 6	3 3	8 23	23 5	4 9	16 13	1 15	16 11	2 2	9 18	0 44	14 39
S 26	8 31	0 47	2 17	14 52	2 7	2 56	8 30	23 6	4 7	16 13	1 15	16 12	2 2	9 16	0 44	14 39
S 27	8 9	3s45	1 4	14 18	2 8	2 48	8 36	23 7	4 5	16 14	1 15	16 14	2 1	9 15	0 44	14 40
M28	7s46	7s56	0n10	13s43	2s 9	2n39	8n41	23n 8	4n 3	16s14	1n15	16n15	2s 1	9s14	0s44	14n40

Julian Day Number = 2484083.5, Delta T = 88.37 sec
 Ecliptic obliquity = 23°25'31", Nutation = 0°00'08", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 25°59'06", Lahiri = 25°06'06"

ASTRODIENST EPHEMERIS for the year 2089

geocentric

MARCH 2089

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	10 38 11	11° 7'48"	4° 4'	1° 2'	15° R50	4° R 3	18° M54	21° B51	8° K 6	21° R15	22° V 1	18° A52	20° A32	21° B22	25° D20	T 1
W 2	10 42 8	12° 8'01"	16° 59'	2° 47'	15° K13	3° M54	18° 55'	21° 55'	8° 10'	21° R13	22° 2	18° 54'	20° 29'	21° 29'	25° I20	W 2
T 3	10 46 4	13° 8'13"	29° 31'	4° 32'	14° 36'	3° 46'	18° 55'	22° 0	8° 13'	21° 12'	22° 4	18° 55'	20° 25'	21° 36'	25° 20'	T 3
F 4	10 50 1	14° 8'23"	11° 47'	6° 18'	13° 58'	3° 39'	18° R55	22° 4	8° 16'	21° 10'	22° 5	18° R56	20° 22'	21° 43'	25° 20'	F 4
S 5	10 53 58	15° 8'32"	23° 49'	8° 6'	13° 20'	3° 33'	18° 55'	22° 8	8° 20'	21° 9	22° 6	18° 56'	20° 19'	21° 49'	25° 21'	S 5
S 6	10 57 54	16° 8'39"	5° 44'	9° 54'	12° 43'	3° 27'	18° 55'	22° 13'	8° 23'	21° 7	22° 7	18° 54'	20° 16'	21° 56'	25° 21'	S 6
M 7	11 1 51	17° 8'44"	17° 35'	11° 44'	12° 7	3° 22'	18° 54'	22° 17'	8° 27'	21° 6	22° 8	18° 50'	20° 13'	22° 3	25° 21'	M 7
T 8	11 5 47	18° 8'48"	29° 27'	13° 34'	11° 31'	3° 18'	18° 54'	22° 22'	8° 30'	21° 4	22° 9	18° 46'	20° 10'	22° 9	25° 22'	T 8
W 9	11 9 44	19° 8'50"	11° 44'	15° 26'	10° 56'	3° 15'	18° 53'	22° 27'	8° 34'	21° 3	22° 11'	18° 41'	20° 6	22° 16'	25° 23'	W 9
T 10	11 13 40	20° 8'51"	23° 28'	17° 19'	10° 23'	3° 12'	18° 52'	22° 32'	8° 37'	21° 1	22° 12'	18° 35'	20° 3	22° 23'	25° 23'	T 10
F 11	11 17 37	21° 8'50"	5° 42'	19° 13'	9° 51'	3° 11'	18° 50'	22° 37'	8° 40'	21° 0	22° 13'	18° 30'	20° 0	22° 30'	25° 24'	F 11
S 12	11 21 33	22° 8'46"	18° 6	21° 8	9° 21'	3° 10'	18° 49'	22° 42'	8° 44'	20° 59'	22° 14'	18° 27'	19° 57'	22° 36'	25° 25'	S 12
S 13	11 25 30	23° 8'41"	0° 42'	23° 3	8° 52'	3° D10	18° 47'	22° 47'	8° 47'	20° 57'	22° 16'	18° 24'	19° 54'	22° 43'	25° 26'	S 13
M14	11 29 26	24° 8'34"	13° 30'	25° 0	8° 26'	3° 10'	18° 46'	22° 52'	8° 50'	20° 56'	22° 17'	18° D23	19° 50'	22° 50'	25° 27'	M14
T 15	11 33 23	25° 8'25"	26° 31'	26° 58'	8° 2	3° 11'	18° 44'	22° 57'	8° 54'	20° 54'	22° 18'	18° 23'	19° 47'	22° 57'	25° 28'	T 15
W16	11 37 20	26° 8'14"	9° 44'	28° 56'	7° 39'	3° 13'	18° 41'	23° 3	8° 57'	20° 53'	22° 19'	18° 24'	19° 44'	23° 3	25° 29'	W16
T 17	11 41 16	27° 8'01"	23° 10'	0° 55'	7° 20'	3° 16'	18° 39'	23° 8	9° 0	20° 52'	22° 21'	18° 26'	19° 41'	23° 10'	25° 31'	T 17
F 18	11 45 13	28° 7'45"	6° 44'	2° 54'	7° 2	3° 19'	18° 37'	23° 13'	9° 4	20° 51'	22° 22'	18° 27'	19° 38'	23° 17'	25° 32'	F 18
S 19	11 49 9	29° 7'28"	20° 41'	4° 54'	6° 47'	3° 23'	18° 34'	23° 19'	9° 7	20° 49'	22° 23'	18° 28'	19° 35'	23° 23'	25° 33'	S 19
S 20	11 53 6	0° 7'08"	4° 46'	6° 54'	6° 34'	3° 28'	18° 31'	23° 25'	9° 10'	20° 48'	22° 25'	18° R28	19° 31'	23° 30'	25° 35'	S 20
M21	11 57 2	1° 6'46"	19° 1	8° 54'	6° 24'	3° 34'	18° 28'	23° 30'	9° 14'	20° 47'	22° 26'	18° 27'	19° 28'	23° 37'	25° 36'	M21
T 22	12 0 59	2° 6'21"	3° 26'	10° 53'	6° 16'	3° 40'	18° 25'	23° 36'	9° 17'	20° 46'	22° 27'	18° 26'	19° 25'	23° 44'	25° 38'	T 22
W23	12 4 55	3° 5'54"	17° 55'	12° 52'	6° 11'	3° 46'	18° 21'	23° 42'	9° 20'	20° 45'	22° 29'	18° 24'	19° 22'	23° 50'	25° 40'	W23
T 24	12 8 52	4° 5'25"	2° 44'	14° 50'	6° 8	3° 54'	18° 18'	23° 48'	9° 23'	20° 43'	22° 30'	18° 22'	19° 19'	23° 57'	25° 42'	T 24
F 25	12 12 49	5° 4'54"	16° 47'	6° D 7	4° 2	4° 2	18° 14'	23° 54'	9° 27'	20° 42'	22° 31'	18° 20'	19° 15'	24° 4	25° 44'	F 25
S 26	12 16 45	6° 4'20"	0° 59'	18° 41'	6° 9	4° 10'	18° 10'	24° 0	9° 30'	20° 41'	22° 33'	18° 19'	19° 12'	24° 10'	25° 45'	S 26
S 27	12 20 42	7° 3'44"	14° 56'	20° 34'	6° 14	4° 19'	18° 6	24° 6	9° 33'	20° 40'	22° 34'	18° D19	19° 9	24° 17'	25° 48'	S 27
M28	12 24 38	8° 3'07"	28° 33'	22° 24'	6° 20	4° 29'	18° 2	24° 12'	9° 36'	20° 39'	22° 35'	18° 19'	19° 6	24° 24'	25° 50'	M28
T 29	12 28 35	9° 2'27"	11° 44'	24° 11'	6° 29	4° 39'	17° 57'	24° 18'	9° 39'	20° 38'	22° 37'	18° 20'	19° 3	24° 31'	25° 52'	T 29
W30	12 32 31	10° 1'46"	24° 44'	25° 55'	6° 40	4° 50'	17° 53'	24° 24'	9° 42'	20° 37'	22° 38'	18° 20'	19° 0	24° 37'	25° 54'	W30
T 31	12 36 28	11° 1'03"	7° 20'	27° 35'	6° 53	5° D 1	17° M48	24° B31	9° 45	20° R36	22° V40	18° A21	18° A56	24° B44	25° I56	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	7s23	11s35	1n22	13s 6	2s 9	2n29	8n44	23n 8	4n 1	16s14	1n15	16n16	2s 1	9s12	0s44	14n41
W 2	7 0	14 33	2 27	12 29	2 9	2 17	8 47	23 8	3 59	16 14	1 15	16 18	2 1	9 11	0 44	14 41
T 3	6 37	16 43	3 23	11 50	2 8	2 5	8 49	23 8	3 57	16 14	1 16	16 19	2 0	9 10	0 44	14 42
F 4	6 14	18 4	4 9	11 9	2 7	1 52	8 50	23 8	3 55	16 13	1 16	16 20	2 0	9 9	0 44	14 42
S 5	5 51	18 34	4 43	10 28	2 5	1 37	8 50	23 8	3 53	16 13	1 16	16 22	2 0	9 7	0 44	14 43
S 6	5 28	18 15	5 4	9 45	2 3	1 23	8 49	23 7	3 51	16 13	1 16	16 23	2 0	9 6	0 44	14 43
M 7	5 4	17 7	5 12	9 1	2 1	1 7	8 47	23 6	3 49	16 13	1 16	16 24	1 59	9 5	0 44	14 44
T 8	4 41	15 15	5 7	8 16	1 58	0 51	8 44	23 5	3 47	16 12	1 16	16 26	1 59	9 3	0 44	14 44
W 9	4 18	12 44	4 48	7 29	1 54	0 35	8 40	23 4	3 45	16 12	1 17	16 27	1 59	9 2	0 44	14 45
T 10	3 54	9 39	4 17	6 42	1 50	0 18	8 36	23 2	3 43	16 11	1 17	16 29	1 59	9 1	0 44	14 45
F 11	3 30	6 7	3 33	5 53	1 45	0 1	8 30	23 0	3 40	16 11	1 17	16 30	1 58	9 0	0 44	14 46
S 12	3 7	2 16	2 39	5 3	1 40	0s16	8 24	22 58	3 38	16 10	1 17	16 32	1 58	8 58	0 44	14 46
S 13	2 43	1n44	1 36	4 12	1 34	0 33	8 17	22 56	3 36	16 10	1 17	16 33	1 58	8 57	0 44	14 47
M14	2 20	5 44	0 27	3 20	1 28	0 50	8 9	22 54	3 34	16 9	1 17	16 35	1 58	8 56	0 44	14 47
T 15	1 56	9 32	0s45	2 27	1 21	1 7	8 0	22 52	3 32	16 9	1 18	16 36	1 58	8 55	0 44	14 48
W16	1 32	12 54	1 55	1 33	1 14	1 24	7 51	22 49	3 29	16 8	1 18	16 38	1 57	8 53	0 44	14 48
T 17	1 8	15 39	3 0	0 39	1 6	1 40	7 42	22 46	3 27	16 7	1 18	16 39	1 57	8 52	0 44	14 48
F 18	0 45	17 33	3 56	0n16	0 58	1 55	7 32	22 44	3 25	16 6	1 18	16 41	1 57	8 51	0 44	14 49
S 19	0 21	18 27	4 39	1 12	0 49	2 11	7 21	22 40	3 23	16 5	1 18	16 43	1 57	8 50	0 44	14 49
S 20	0n 3	18 14	5 7	2 8	0 39	2 25	7 10	22 37	3 21	16 4	1 18	16 44	1 56	8 48	0 44	14 50
M21	0 27	16 52	5 16	3 5	0 29	2 39	6 59	22 34	3 19	16 3	1 18	16 46	1 56	8 47	0 44	14 50
T 22	0 50	14 26	5 5	4 1	0 19	2 53	6 48	22 30	3 17	16 2	1 19	16 47	1 56	8 46	0 44	14 50
W23	1 14	11 5	4 35	4 57	0 8	3 6	6 36	22 27	3 14	16 1	1 19	16 49	1 56	8 45	0 44	14 51
T 24	1 37	7 5	3 47	5 53	0n 3	3 18	6 24	22 23	3 12	16 0	1 19	16 51	1 56	8 44	0 44	14 51
F 25	2 1	2 40	2 46	6 49	0 15	3 29	6 13	22 19	3 10	15 59	1 19	16 52	1 55	8 42	0 44	14 51
S 26	2 25	1s50	1 34	7 44	0 27	3 39	6 1	22 15	3 8	15 58	1 19	16 54	1 55	8 41	0 44	14 52
S 27	2 48	6 10	0 19	8 37	0 39	3 49	5 48	22 11	3 6	15 57	1 19	16 56	1 55	8 40	0 44	14 52
M28	3 12	10 4	0n56	9 30	0 51	3 58	5 36	22 6	3 4	15 55	1 19	16 57	1 55	8 39	0 44	14 53
T 29	3 35	13 22	2 7	10 21	1 3	4 6	5 24	22 2	3 2	15 54	1 19	16 59	1 55	8 38	0 44	14 53
W30	3 58	15 54	3 8	11 10	1 15	4 13	5 12	21 57	3 0	15 53	1 20	17 1	1 54	8 37	0 44	14 53
T 31	4n21	17s35	3n59	11n57	1n26	4s20	5n 0	21n53	2n58	15s51	1n20	17n 2	1s54	8s35	0s44	14n53

Julian Day Number = 2484111.5, Delta T = 88.40 sec
 Ecliptic obliquity = 23°25'31", Nutation = 0°00'07", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 25°59'10", Lahiri = 25°06'10"

ASTRODIENST EPHEMERIS for the year 2089

geocentric

APRIL 2089

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	12 40 24	12°0'18"	19°39'39"	29°10'10"	7°8'8"	5°13'13"	17°43'43"	24°37'37"	9°48'48"	20°35'35"	22°41'41"	18°22'22"	18°53'53"	24°51'51"	25°59'59"	F 1
S 2	12 44 21	12°59'31"	1°34'45"	0°42'42"	7°26'26"	5°26'26"	17°38'38"	24°44'44"	9°51'51"	20°34'34"	22°42'42"	18°22'22"	18°50'50"	24°58'58"	26°1'1'	S 2
S 3	12 48 18	13°58'43"	13°42'42"	2°8'8"	7°45'45"	5°39'39"	17°33'33"	24°50'50"	9°54'54"	20°33'33"	22°44'44"	18°R22	18°47'47"	25°4'4"	26°4'4"	S 3
M 4	12 52 14	14°57'53"	25°35'35"	3°29'29"	8°6'6"	5°52'52"	17°28'28"	24°57'57"	9°57'57"	20°33'33"	22°45'45"	18°22'22"	18°44'44"	25°11'11"	26°7'7"	M 4
T 5	12 56 11	15°57'01"	7°29'29"	4°45'45"	8°29'29"	6°6'6"	17°22'22"	25°3'3"	10°0'0"	20°32'32"	22°47'47"	18°22'22"	18°41'41"	25°18'18"	26°9'9"	T 5
W 6	13 0 7	16°56'07"	19°27'27"	5°55'55"	8°53'53"	6°20'20"	17°17'17"	25°10'10"	10°3'3"	20°31'31"	22°48'48"	18°22'22"	18°37'37"	25°24'24"	26°12'12"	W 6
T 7	13 4 4	17°55'11"	1°35'35"	6°59'59"	9°20'20"	6°35'35"	17°11'11"	25°17'17"	10°6'6"	20°30'30"	22°49'49"	18°D22	18°34'34"	25°31'31"	26°15'15"	T 7
F 8	13 8 0	18°54'14"	13°54'54"	7°57'57"	9°47'47"	6°51'51"	17°5'5"	25°23'23"	10°9'9"	20°29'29"	22°51'51"	18°22'22"	18°31'31"	25°38'38"	26°18'18"	F 8
S 9	13 11 57	19°53'14"	26°29'29"	8°49'49"	10°17'17"	7°6'6"	16°59'59"	25°30'30"	10°12'12"	20°29'29"	22°52'52"	18°22'22"	18°28'28"	25°45'45"	26°21'21"	S 9
S 10	13 15 53	20°52'13"	9°20'20"	9°35'35"	10°48'48"	7°23'23"	16°53'53"	25°37'37"	10°15'15"	20°28'28"	22°54'54"	18°22'22"	18°25'25"	25°51'51"	26°24'24"	S 10
M 11	13 19 50	21°51'10"	22°29'29"	10°14'14"	11°20'20"	7°39'39"	16°47'47"	25°44'44"	10°18'18"	20°27'27"	22°55'55"	18°R22	18°21'21"	25°58'58"	26°27'27"	M 11
T 12	13 23 46	22°50'05"	5°53'53"	10°46'46"	11°54'54"	7°56'56"	16°40'40"	25°51'51"	10°20'20"	20°27'27"	22°56'56"	18°22'22"	18°18'18"	26°5'5"	26°30'30"	T 12
W 13	13 27 43	23°48'58"	19°33'33"	11°12'12"	12°29'29"	8°14'14"	16°34'34"	25°58'58"	10°23'23"	20°26'26"	22°58'58"	18°21'21"	18°15'15"	26°11'11"	26°33'33"	W 13
T 14	13 31 40	24°47'48"	3°12'12"	11°31'31"	13°5'5"	8°32'32"	16°27'27"	26°5'5"	10°26'26"	20°26'26"	22°59'59"	18°21'21"	18°12'12"	26°18'18"	26°37'37"	T 14
F 15	13 35 36	25°46'37"	17°26'26"	11°44'44"	13°43'43"	8°50'50"	16°21'21"	26°12'12"	10°28'28"	20°25'25"	23°1'1"	18°20'20"	18°9'9"	26°25'25"	26°40'40"	F 15
S 16	13 39 33	26°45'23"	1°35'35"	11°50'50"	14°21'21"	9°9'9"	16°14'14"	26°19'19"	10°31'31"	20°25'25"	23°2'2"	18°19'19"	18°6'6"	26°32'32"	26°43'43"	S 16
S 17	13 43 29	27°44'08"	15°47'47"	11°R50	15°1'1"	9°28'28"	16°7'7"	26°26'26"	10°34'34"	20°24'24"	23°4'4"	18°19'19"	18°2'2"	26°38'38"	26°47'47"	S 17
M 18	13 47 26	28°42'49"	0°1'1"	11°45'45"	15°42'42"	9°48'48"	16°0'0"	26°33'33"	10°36'36"	20°24'24"	23°5'5"	18°D18	17°59'59"	26°45'45"	26°50'50"	M 18
T 19	13 51 22	29°41'29"	14°13'13"	11°33'33"	16°24'24"	10°7'7"	15°53'53"	26°40'40"	10°39'39"	20°23'23"	23°6'6"	18°19'19"	17°56'56"	26°52'52"	26°54'54"	T 19
W 20	13 55 19	0°40'06"	28°21'21"	11°16'16"	17°7'7"	10°28'28"	15°46'46"	26°48'48"	10°41'41"	20°23'23"	23°8'8"	18°19'19"	17°53'53"	26°59'59"	26°58'58"	W 20
T 21	13 59 15	1°38'41"	12°12'12"	10°54'54"	17°51'51"	10°48'48"	15°39'39"	26°55'55"	10°44'44"	20°23'23"	23°9'9"	18°20'20"	17°50'50"	27°5'5"	27°1'1"	T 21
F 22	14 3 12	2°37'14"	26°18'18"	10°27'27"	18°35'35"	11°9'9"	15°32'32"	27°2'2"	10°46'46"	20°23'23"	23°11'11"	18°21'21"	17°46'46"	27°12'12"	27°5'5"	F 22
S 23	14 7 9	3°35'45"	10°13'13"	9°57'57"	19°21'21"	11°30'30"	15°24'24"	27°10'10"	10°49'49"	20°22'22"	23°12'12"	18°22'22"	17°43'43"	27°19'19"	27°9'9"	S 23
S 24	14 11 5	4°34'14"	23°34'34"	9°23'23"	20°8'8"	11°52'52"	15°17'17"	27°17'17"	10°51'51"	20°22'22"	23°13'13"	18°R22	17°40'40"	27°25'25"	27°13'13"	S 24
M 25	14 15 2	5°32'41"	6°15'15"	8°46'46"	20°55'55"	12°14'14"	15°9'9"	27°24'24"	10°53'53"	20°22'22"	23°15'15"	18°22'22"	17°37'37"	27°32'32"	27°17'17"	M 25
T 26	14 18 58	6°31'06"	19°55'55"	8°7'7"	21°43'43"	12°36'36"	15°2'2"	27°32'32"	10°56'56"	20°22'22"	23°16'16"	18°20'20"	17°34'34"	27°39'39"	27°21'21"	T 26
W 27	14 22 55	7°29'29"	2°41'41"	7°28'28"	22°32'32"	12°58'58"	14°54'54"	27°39'39"	10°58'58"	20°22'22"	23°18'18"	18°17'17"	17°31'31"	27°46'46"	27°25'25"	W 27
T 28	14 26 51	8°27'51"	15°13'13"	6°47'47"	23°22'22"	13°21'21"	14°47'47"	27°47'47"	11°0'0"	20°21'21"	23°19'19"	18°14'14"	17°27'27"	27°52'52"	27°29'29"	T 28
F 29	14 30 48	9°26'11"	27°30'30"	6°7'7"	24°12'12"	13°44'44"	14°39'39"	27°54'54"	11°2'2"	20°21'21"	23°20'20"	18°11'11"	17°24'24"	27°59'59"	27°33'33"	F 29
S 30	14 34 44	10°24'29"	9°36'36"	5°28'28"	25°3'3"	14°1'1"	14°13'13"	28°5'5"	11°3'3"	20°D21	23°22'22"	18°18'18"	17°21'21"	28°6'6"	27°13'13"	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
F 1	4n45	18s24	4n38	12n42	1n38	4s25	4n48	21n48	2n56	15s50	1n20	17n 4	1s54	8s34	0s44	14n54	0n17	6s48	16s48	7s12	7s24	16s 7	17n29	5s53	5s53
S 2	5 8	18 21	5 4	13 25	1 49	4 30	4 36	21 43	2 54	15 48	1 20	17 6	1 54	8 33	0 44	14 54	0 17	6 47	16 48	7 12	7 22	16 5	17 29	5 53	5 53
S 3	5 31	17 29	5 16	14 5	2 0	4 34	4 24	21 38	2 52	15 47	1 20	17 8	1 54	8 32	0 44	14 54	0 17	6 47	16 48	7 12	7 21	16 4	17 30	5 53	5 53
M 4	5 54	15 51	5 15	14 43	2 10	4 37	4 13	21 32	2 50	15 45	1 20	17 9	1 54	8 31	0 44	14 55	0 17	6 46	16 47	7 12	7 20	16 3	17 30	5 52	5 52
T 5	6 16	13 33	5 0	15 17	2 20	4 39	4 1	21 27	2 48	15 43	1 20	17 11	1 53	8 30	0 44	14 55	0 17	6 46	16 47	7 12	7 19	16 2	17 31	5 52	5 52
W 6	6 39	10 40	4 32	15 49	2 28	4 41	3 50	21 22	2 46	15 42	1 20	17 13	1 53	8 29	0 44	14 55	0 17	6 45	16 47	7 12	7 18	16 1	17 31	5 51	5 51
T 7	7 2	7 18	3 51	16 18	2 37	4 42	3 38	21 16	2 44	15 40	1 20	17 15	1 53	8 28	0 44	14 55	0 17	6 45	16 47	7 12	7 16	16 0	17 31	5 51	5 51
F 8	7 24	3 34	3 0	16 44	2 44	4 42	3 27	21 10	2 43	15 38	1 20	17 16	1 53	8 27	0 44	14 56	0 17	6 44	16 47	7 12	7 15	15 59	17 32	5 51	5 51
S 9	7 46	0n25	1 58	17 7	2 50	4 41	3 16	21 4	2 41	15 37	1 20	17 18	1 53	8 26	0 44	14 56	0 17	6 43	16 47	7 12	7 14	15 58	17 32	5 50	5 50
S 10	8 9	4 28	0 50	17 26	2 55	4 39	3 5	20 58	2 39	15 35	1 21	17 20	1 53	8 25	0 44	14 56	0 17	6 43	16 47	7 12	7 13	15 57	17 33	5 50	5 50
M11	8 31	8 23	0s23	17 43	2 59	4 37	2 55	20 52	2 37	15 33	1 21	17 22	1 52	8 23	0 45	14 56	0 17	6 42	16 47	7 12	7 12	15 56	17 33	5 50	5 50
T 12	8 52	11 58	1 36	17 56	3 2	4 34	2 44	20 46	2 35	15 31	1 21	17 23	1 52	8 22	0 45	14 56	0 17	6 42	16 47	7 12	7 10	15 55	17 34	5 49	5 49
W13	9 14	14 58	2 44	18 5	3 4	4 30	2 34	20 40	2 33	15 29	1 21	17 25	1 52	8 21	0 45	14 57	0 17	6 41	16 47	7 12	7 9	15 53	17 34	5 49	5 49
T 14	9 36	17 9	3 45	18 12	3 4	4 26	2 24	20 33	2 32	15 27	1 21	17 27	1 52	8 20	0 45	14 57	0 17	6 41	16 47	7 11	7 8	15 52	17 34	5 49	5 49
F 15	9 57	18 19	4 32	18 15	3 3	4 20	2 14	20 27	2 30	15 25	1 21	17 29	1 52	8 19	0 45	14 57	0 17	6 40	16 47	7 11	7 7	15 51	17 35	5 48	5 48
S 16	10 19	18 22	5 3	18 15	3 1	4 15	2 4	20 20	2 28	15 24	1 21	17 30	1 52	8 18	0 45	14 57	0 17	6 40	16 47	7 11	7 6	15 50	17 35	5 48	5 48
S 17	10 40	17 15	5 16	18 11	2 57	4 8	1 55	20 13	2 26	15 22	1 21	17 32	1 51	8 18	0 45	14 57	0 17	6 39	16 47	7 10	7 4	15 49	17 36	5 48	5 48
M18	11 1	15 5	5 10	18 5	2 52	4 1	1 45	20 7	2 25	15 20	1 21	17 34	1 51	8 17	0 45	14 57	0 17	6 39	16 47	7 10	7 3	15 48	17 36	5 47	5 47
T 19	11 21	12 0	4 45	17 55	2 45	3 53	1 36	19 59	2 23	15 17	1 21	17 36	1 51	8 16	0 45	14 58	0 17	6 38	16 47	7 11	7 2	15 47	17 36	5 47	5 47
W20	11 42	8 14	4 3	17 42	2 37	3 45	1 27	19 52	2 21	15 15	1 21	17 38	1 51	8 15	0 45	14 58	0 17	6 38	16 47	7 11	7 1	15 46	17 37	5 47	5 47
T 21	12 2	4 2	3 6	17 26	2 28	3 36	1 18	19 45	2 20	15 13	1 21	17 39	1 51	8 14	0 45	14 58	0 17	6 38	16 47	7 11	6 59	15 45	17 37	5 46	5 46
F 22	12 22	0s21	1 59	17 7	2 17	3 27	1 10	19 38	2 18	15 11	1 21	17 41	1 51	8 13	0 45	14 58	0 17	6 37	16 47	7 12	6 58	15 43	17 37	5 46	5 46
S 23	12 42	4 41	0 46	16 46	2 5	3 16	1 1	19 30	2 16	15 9	1 21	17 43	1 51	8 12	0 45	14 58	0 17	6 37	16 47	7 12	6 57	15 42	17 38	5 46	5 46
S 24	13 2	8 42	0n29	16 23	1 52	3 6	0 53	19 23	2 15	15 7	1 21	17 45	1 51	8 11	0 45	14 58	0 17	6 36	16 48	7 12	6 56	15 41	17 38	5 46	5 46
M25	13 22	12 13	1 40	15 58	1 38	2 55	0 45	19 15	2 13	15 5	1 21	17 47	1 50	8 10	0 45	14 58	0 17	6 36	16 48	7 12	6 55	15 40	17 39	5 45	5 45
T 26	13 41	15 3	2 45	15 31	1 23	2 43	0 37	19 7	2 12	15 3	1 21	17 48	1 50	8 9	0 45	14 58	0 17	6 35	16 48	7 11	6 53	15 39	17 39	5 45	5 45
W27	14 0	17 5	3 41	15 3	1 7	2 31	0 29	18 59	2 10	15 1	1 21	17 50	1 50	8 9	0 45	14 58	0 17	6 35	16 48	7 10	6 52	15 38	17 39	5 45	5 45
T 28	14 19	18 14	4 24	14 34	0 50	2 18	0 22	18 51	2 9	14 58	1 21	17 52	1 50	8 8	0 45	14 58	0 17	6 35	16 48	7 9	6 51	15 37	17 40	5 44	5 44
F 29	14 38	18 30	4 54	14 5	0 34	2 5	0 15	18 43	2 7	14 56	1 21	17 54	1 50	8 7	0 45	14 58	0 18	6 34	16 48	7 8	6 50	15 36	17 40	5 43	5 43
S 30	14n56	17s55	5n11	13n36	0n16	1s51	0n 7	18n35	2n 6	14s54	1n21	17n55	1s50	8s 6	0s45	14n58	0n18	6s34	16s48	7s 6	6s49	15s34	17n40	5s44	5s44

ASTRODIENST EPHEMERIS for the year 2089

geocentric

MAY 2089

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	14 38 41	11♂22'46	21♂34	4♂R51	25♂55	14♂31	14♂R24	28♂9	11♂7	20♂21	23♂23	18♂R6	17♂18	28♂12	27♂42	S 1
M 2	14 42 38	12♂21'01	3♂28	4♂15	26♂47	14♂55	14♂M17	28♂17	11♂9	20♂21	23♂24	18♂4	17♂15	28♂19	27♂46	M 2
T 3	14 46 34	13♂19'15	15♂21	3♂43	27♂40	15♂19	14♂9	28♂24	11♂11	20♂21	23♂26	18♂D4	17♂12	28♂26	27♂50	T 3
W 4	14 50 31	14♂17'27	27♂19	3♂13	28♂34	15♂43	14♂1	28♂32	11♂13	20♂22	23♂27	18♂5	17♂8	28♂33	27♂55	W 4
T 5	14 54 27	15♂15'38	9♂27	2♂48	29♂28	16♂8	13♂54	28♂40	11♂15	20♂22	23♂28	18♂6	17♂5	28♂39	27♂59	T 5
F 6	14 58 24	16♂13'47	21♂49	2♂26	0♂Y23	16♂33	13♂46	28♂47	11♂16	20♂22	23♂30	18♂8	17♂2	28♂46	28♂4	F 6
S 7	15 2 20	17♂11'55	4♂Y29	2♂9	1♂18	16♂58	13♂38	28♂55	11♂18	20♂22	23♂31	18♂9	16♂59	28♂53	28♂8	S 7
S 8	15 6 17	18♂10'01	17♂30	1♂56	2♂13	17♂24	13♂31	29♂3	11♂20	20♂22	23♂32	18♂R10	16♂56	28♂59	28♂13	S 8
M 9	15 10 13	19♂8'06	0♂53	1♂48	3♂9	17♂49	13♂23	29♂10	11♂22	20♂23	23♂34	18♂9	16♂52	29♂6	28♂17	M 9
T 10	15 14 10	20♂6'10	14♂38	1♂D44	4♂6	18♂15	13♂15	29♂18	11♂24	20♂23	23♂35	18♂7	16♂49	29♂13	28♂22	T 10
W11	15 18 7	21♂4'12	28♂43	1♂45	5♂3	18♂41	13♂8	29♂26	11♂25	20♂23	23♂36	18♂4	16♂46	29♂20	28♂27	W11
T 12	15 22 3	22♂2'12	13♂II3	1♂51	6♂1	19♂8	13♂0	29♂33	11♂27	20♂24	23♂37	17♂59	16♂43	29♂26	28♂32	T 12
F 13	15 26 0	23♂0'11	27♂33	2♂1	6♂58	19♂34	12♂53	29♂41	11♂29	20♂24	23♂39	17♂54	16♂40	29♂33	28♂36	F 13
S 14	15 29 56	23♂58'08	12♂56	2♂16	7♂57	20♂1	12♂45	29♂49	11♂30	20♂24	23♂40	17♂49	16♂37	29♂40	28♂41	S 14
S 15	15 33 53	24♂56'03	26♂37	2♂36	8♂55	20♂28	12♂38	29♂57	11♂32	20♂25	23♂41	17♂45	16♂33	29♂47	28♂46	S 15
M16	15 37 49	25♂53'56	11♂0	2♂59	9♂54	20♂55	12♂31	0♂II4	11♂33	20♂25	23♂43	17♂42	16♂30	29♂53	28♂51	M16
T 17	15 41 46	26♂51'48	25♂12	3♂27	10♂54	21♂23	12♂24	0♂12	11♂35	20♂26	23♂44	17♂D41	16♂27	29♂59	28♂56	T 17
W18	15 45 42	27♂49'37	9♂II1	4♂0	11♂53	21♂50	12♂16	0♂20	11♂36	20♂26	23♂45	17♂42	16♂24	0♂7	29♂1	W18
T 19	15 49 39	28♂47'25	22♂57	4♂36	12♂53	22♂18	12♂9	0♂28	11♂37	20♂27	23♂46	17♂43	16♂21	0♂13	29♂6	T 19
F 20	15 53 36	29♂45'11	6♂29	5♂16	13♂54	22♂46	12♂2	0♂35	11♂39	20♂28	23♂47	17♂44	16♂18	0♂20	29♂11	F 20
S 21	15 57 32	0♂II42'56	19♂49	5♂59	14♂54	23♂14	11♂55	0♂43	11♂40	20♂28	23♂49	17♂R45	16♂14	0♂27	29♂16	S 21
S 22	16 1 29	1♂40'39	2♂M56	6♂47	15♂55	23♂42	11♂48	0♂51	11♂41	20♂29	23♂50	17♂44	16♂11	0♂34	29♂21	S 22
M23	16 5 25	2♂38'21	15♂52	7♂38	16♂57	24♂11	11♂42	0♂59	11♂42	20♂30	23♂51	17♂40	16♂8	0♂40	29♂26	M23
T 24	16 9 22	3♂36'01	28♂36	8♂32	17♂58	24♂40	11♂35	1♂7	11♂43	20♂31	23♂52	17♂35	16♂5	0♂47	29♂31	T 24
W25	16 13 18	4♂33'40	11♂7	9♂29	19♂0	25♂9	11♂28	1♂14	11♂44	20♂31	23♂53	17♂28	16♂2	0♂54	29♂37	W25
T 26	16 17 15	5♂31'18	23♂30	10♂30	20♂2	25♂38	11♂22	1♂22	11♂45	20♂32	23♂54	17♂20	15♂58	1♂0	29♂42	T 26
F 27	16 21 11	6♂28'55	5♂341	11♂34	21♂5	26♂7	11♂16	1♂30	11♂46	20♂33	23♂55	17♂11	15♂55	1♂7	29♂47	F 27
S 28	16 25 8	7♂26'31	17♂44	12♂41	22♂7	26♂36	11♂9	1♂38	11♂47	20♂34	23♂56	17♂2	15♂52	1♂14	29♂52	S 28
S 29	16 29 5	8♂24'05	29♂40	13♂51	23♂10	27♂6	11♂3	1♂45	11♂48	20♂35	23♂57	16♂55	15♂49	1♂21	29♂58	S 29
M30	16 33 1	9♂21'39	11♂32	15♂4	24♂13	27♂35	10♂57	1♂53	11♂49	20♂36	23♂59	16♂49	15♂46	1♂27	0♂3	M30
T 31	16 36 58	10♂II19'12	23♂24	16♂19	25♂Y17	28♂0	10♂M51	2♂II1	11♂50	20♂37	24♂Y0	16♂45	15♂43	1♂34	0♂8	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	15n14	16s32	5n14	13n7	0s1	1s37	0n0	18n27	2n4	14s52	1n21	17n57	1s50	8s5	0s45	14n58
M 2	15 32	14 27	5 3	12 39	0 18	1 22	0s6	18 18	2 3	14 50	1 21	17 59	1 50	8 5	0 45	14 58
T 3	15 50	11 46	4 40	12 12	0 35	1 7	0 13	18 10	2 1	14 47	1 21	18 1	1 50	8 4	0 45	14 58
W 4	16 7	8 35	4 4	11 46	0 52	0 52	0 19	18 1	2 0	14 45	1 21	18 3	1 49	8 3	0 45	14 58
T 5	16 24	4 59	3 17	11 23	1 8	0 36	0 26	17 52	1 58	14 43	1 21	18 4	1 49	8 3	0 45	14 58
F 6	16 41	1 6	2 19	11 1	1 23	0 20	0 32	17 43	1 57	14 41	1 20	18 6	1 49	8 2	0 45	14 58
S 7	16 58	2n55	1 14	10 41	1 38	0 4	0 37	17 34	1 55	14 39	1 20	18 8	1 49	8 1	0 45	14 58
S 8	17 14	6 55	0 4	10 24	1 52	0n13	0 43	17 25	1 54	14 36	1 20	18 9	1 49	8 0	0 45	14 58
M 9	17 30	10 42	1s9	10 9	2 5	0 31	0 49	17 16	1 52	14 34	1 20	18 11	1 49	8 0	0 45	14 58
T 10	17 45	14 0	2 20	9 56	2 17	0 48	0 54	17 7	1 51	14 32	1 20	18 13	1 49	7 59	0 45	14 58
W11	18 1	16 33	3 23	9 46	2 28	1 6	0 59	16 57	1 50	14 30	1 20	18 15	1 49	7 59	0 45	14 58
T 12	18 16	18 8	4 15	9 38	2 38	1 24	1 4	16 48	1 48	14 28	1 20	18 16	1 49	7 58	0 45	14 57
F 13	18 31	18 33	4 52	9 33	2 47	1 42	1 9	16 38	1 47	14 26	1 20	18 18	1 49	7 57	0 45	14 57
S 14	18 45	17 44	5 9	9 30	2 56	2 1	1 14	16 28	1 46	14 24	1 20	18 20	1 49	7 57	0 46	14 57
S 15	18 59	15 48	5 7	9 30	3 3	2 20	1 19	16 18	1 44	14 21	1 20	18 22	1 49	7 56	0 46	14 57
M16	19 13	12 53	4 46	9 32	3 9	2 39	1 23	16 9	1 43	14 19	1 19	18 23	1 48	7 56	0 46	14 57
T 17	19 27	9 14	4 7	9 36	3 15	2 58	1 27	15 58	1 42	14 17	1 19	18 25	1 48	7 55	0 46	14 57
W18	19 40	5 7	3 14	9 43	3 19	3 18	1 31	15 48	1 40	14 15	1 19	18 27	1 48	7 55	0 46	14 57
T 19	19 53	0 48	2 10	9 51	3 23	3 38	1 35	15 38	1 39	14 13	1 19	18 28	1 48	7 54	0 46	14 56
F 20	20 5	3s30	1 1	10 2	3 26	3 58	1 39	15 28	1 38	14 11	1 19	18 30	1 48	7 54	0 46	14 56
S 21	20 17	7 34	0n11	10 14	3 28	4 18	1 42	15 17	1 37	14 9	1 19	18 32	1 48	7 53	0 46	14 56
S 22	20 29	11 13	1 21	10 29	3 29	4 38	1 46	15 7	1 35	14 7	1 19	18 33	1 48	7 53	0 46	14 56
M23	20 41	14 15	2 26	10 45	3 29	4 58	1 49	14 56	1 34	14 5	1 18	18 35	1 48	7 53	0 46	14 56
T 24	20 52	16 33	3 22	11 2	3 29	5 19	1 52	14 45	1 33	14 4	1 18	18 36	1 48	7 52	0 46	14 55
W25	21 2	18 0	4 8	11 21	3 28	5 39	1 55	14 34	1 32	14 2	1 18	18 38	1 48	7 52	0 46	14 55
T 26	21 13	18 35	4 41	11 42	3 26	6 0	1 58	14 23	1 31	14 0	1 18	18 40	1 48	7 51	0 46	14 55
F 27	21 23	18 18	5 0	12 4	3 23	6 21	2 1	14 12	1 29	13 58	1 18	18 41	1 48	7 51	0 46	14 55
S 28	21 32	17 11	5 6	12 27	3 20	6 42	2 3	14 1	1 28	13 56	1 18	18 43	1 48	7 51	0 46	14 54
S 29	21 42	15 20	4 59	12 52	3 16	7 3	2 6	13 50	1 27	13 55	1 17	18 44	1 48	7 51	0 46	14 54
M30	21 50	12 51	4 39	13 17	3 12	7 24	2 8	13 39	1 26	13 53	1 17	18 46	1 48	7 50	0 46	14 54
T 31	21n59	9s50	4n6	13n44	3s6	7n45	2s10	13n27	1n25	13s51	1n17	18n48	1s48	7s50	0s46	14n53

Julian Day Number = 2484172.5, Delta T = 88.47 sec
 Ecliptic obliquity = 23°25'31", Nutation = 0°00'04", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 25°59'18, Lahiri = 25°06'19

ASTRODIENST EPHEMERIS for the year 2089
geocentric

JULY 2089

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
F 1	18 39 11	9 ⁵⁶ 42	8 ⁹ 9	14 ⁵³ 34	29 ⁸ 27	14 ³⁸ 38	9 ^R 4	5 ^{II} 50	11 ^R 50	21 ^Ω 20	24 ^Υ 24	14 ^R 6	14 ^Δ 4	5 [≈] 2	3 ^Ω 0	F 1
S 2	18 43 7	10 ⁵³ 55	20 ⁴⁵	16 ⁴²	0 ^{II} 35	15 ¹²	9 ^{III} 3	5 ⁵⁷	11 [✕] 49	21 ²²	24 ²⁴	14 ^Δ 6	14 [°] 1	5 [°] 9	3 [°] 6	S 2
S 3	18 47 4	11 ⁵¹ 08	3 ⁸ 45	18 ⁴⁸	1 ⁴³	15 ⁴⁶	9 [°] 3	6 [°] 4	11 ⁴⁸	21 ²³	24 ²⁵	14 [°] 6	13 ⁵⁸	5 ¹⁶	3 ¹²	S 3
M 4	18 51 1	12 ⁴⁸ 22	17 ¹²	20 ⁵³	2 ⁵²	16 ²⁰	9 [°] 2	6 ¹⁰	11 ⁴⁸	21 ²⁵	24 ²⁵	14 [°] 3	13 ⁵⁵	5 ²²	3 ¹⁷	M 4
T 5	18 54 57	13 ⁴⁵ 35	1 ^{II} 9	22 ⁵⁶	4 [°] 0	16 ⁵⁴	9 ^D 2	6 ¹⁷	11 ⁴⁷	21 ²⁷	24 ²⁵	13 ⁵⁸	13 ⁵¹	5 ²⁹	3 ²³	T 5
W 6	18 58 54	14 ⁴² 49	15 ³⁵	24 ⁵⁸	5 [°] 9	17 ²⁸	9 [°] 2	6 ²⁴	11 ⁴⁶	21 ²⁹	24 ²⁶	13 ⁵⁰	13 ⁴⁸	5 ³⁶	3 ²⁸	W 6
T 7	19 2 50	15 ⁴⁰ 03	0 ^Ω 25	26 ⁵⁸	6 ¹⁸	18 [°] 3	9 [°] 2	6 ³¹	11 ⁴⁵	21 ³¹	24 ²⁶	13 ⁴¹	13 ⁴⁵	5 ⁴³	3 ³⁴	T 7
F 8	19 6 47	16 ³⁷ 17	15 ³³	28 ⁵⁶	7 ²⁶	18 ³⁷	9 [°] 3	6 ³⁷	11 ⁴⁴	21 ³³	24 ²⁷	13 ³⁰	13 ⁴²	5 ⁴⁹	3 ⁴⁰	F 8
S 9	19 10 43	17 ³⁴ 31	0 ^Ω 47	0 ^Ω 52	8 ³⁵	19 ¹²	9 [°] 3	6 ⁴⁴	11 ⁴³	21 ³⁵	24 ²⁷	13 ¹⁹	13 ³⁹	5 ⁵⁶	3 ⁴⁵	S 9
S 10	19 14 40	18 ³¹ 46	15 ⁵⁸	2 ⁴⁶	9 ⁴⁴	19 ⁴⁷	9 [°] 4	6 ⁵⁰	11 ⁴²	21 ³⁷	24 ²⁷	13 ¹⁰	13 ³⁶	6 [°] 3	3 ⁵¹	S 10
M 11	19 18 36	19 ²⁹ 00	0 ^{III} 55	4 ³⁹	10 ⁵⁴	20 ²¹	9 [°] 5	6 ⁵⁷	11 ⁴⁰	21 ³⁸	24 ²⁷	13 [°] 3	13 ³²	6 [°] 9	3 ⁵⁶	M 11
T 12	19 22 33	20 ²⁶ 14	15 ³¹	6 ²⁹	12 [°] 3	20 ⁵⁶	9 [°] 6	7 [°] 3	11 ³⁹	21 ⁴⁰	24 ²⁸	12 ⁵⁹	13 ²⁹	6 ¹⁶	4 [°] 2	T 12
W 13	19 26 30	21 ²³ 28	29 ⁴¹	8 ¹⁸	13 ¹²	21 ³¹	9 [°] 7	7 [°] 9	11 ³⁸	21 ⁴²	24 ²⁸	12 ⁵⁷	13 ²⁶	6 ²³	4 [°] 7	W 13
T 14	19 30 26	22 ²⁰ 42	13 ^Δ 26	10 [°] 4	14 ²¹	22 [°] 6	9 [°] 9	7 ¹⁶	11 ³⁷	21 ⁴⁴	24 ²⁸	12 ^D 56	13 ²³	6 ³⁰	4 ¹³	T 14
F 15	19 34 23	23 ¹⁷ 55	26 ⁴⁶	11 ⁴⁹	15 ³¹	22 ⁴¹	9 ¹⁰	7 ²²	11 ³⁵	21 ⁴⁶	24 ²⁸	12 ^R 56	13 ²⁰	6 ³⁶	4 ¹⁸	F 15
S 16	19 38 19	24 ¹⁵ 09	9 ^{III} 45	13 ³²	16 ⁴⁰	23 ¹⁷	9 ¹²	7 ²⁸	11 ³⁴	21 ⁴⁸	24 ²⁹	12 ⁵⁶	13 ¹⁶	6 ⁴³	4 ²⁴	S 16
S 17	19 42 16	25 ¹² 23	22 ²⁶	15 ¹²	17 ⁵⁰	23 ⁵²	9 ¹⁴	7 ³⁴	11 ³³	21 ⁵⁰	24 ²⁹	12 ⁵³	13 ¹³	6 ⁵⁰	4 ²⁹	S 17
M 18	19 46 12	26 [°] 9'38	4 [✕] 52	16 ⁵¹	19 [°] 0	24 ²⁷	9 ¹⁶	7 ⁴⁰	11 ³¹	21 ⁵²	24 ²⁹	12 ⁴⁸	13 ¹⁰	6 ⁵⁶	4 ³⁴	M 18
T 19	19 50 9	27 [°] 6'52	17 [°] 8	18 ²⁸	20 [°] 9	25 [°] 3	9 ¹⁹	7 ⁴⁶	11 ³⁰	21 ⁵⁴	24 ²⁹	12 ⁴⁰	13 [°] 7	7 [°] 3	4 ⁴⁰	T 19
W 20	19 54 5	28 [°] 4'06	29 [°] 15	20 [°] 3	21 ¹⁹	25 ³⁸	9 ²¹	7 ⁵²	11 ²⁸	21 ⁵⁷	24 ²⁹	12 ³⁰	13 [°] 4	7 ¹⁰	4 ⁴⁵	W 20
T 21	19 58 2	29 [°] 1'21	11 [✕] 16	21 ³⁶	22 ²⁹	26 ¹⁴	9 ²⁴	7 ⁵⁸	11 ²⁷	21 ⁵⁹	24 ²⁹	12 ¹⁸	13 [°] 1	7 ¹⁷	4 ⁵⁰	T 21
F 22	20 1 59	29 ⁵⁸ 37	23 ¹²	23 [°] 7	23 ³⁹	26 ⁵⁰	9 ²⁷	8 [°] 4	11 ²⁵	22 [°] 1	24 ²⁹	12 [°] 5	12 ⁵⁷	7 ²³	4 ⁵⁶	F 22
S 23	20 5 55	0 ^Δ 55'52	5 [≈] 6	24 ³⁶	24 ⁴⁹	27 ²⁶	9 ³⁰	8 ¹⁰	11 ²⁴	22 [°] 3	24 ²⁹	11 ⁵²	12 ⁵⁴	7 ³⁰	5 [°] 1	S 23
S 24	20 9 52	1 ⁵³ 09	16 ⁵⁷	26 [°] 3	26 [°] 0	28 [°] 2	9 ³³	8 ¹⁵	11 ²²	22 [°] 5	24 ^R 29	11 ⁴¹	12 ⁵¹	7 ³⁷	5 [°] 6	S 24
M 25	20 13 48	2 ⁵⁰ 26	28 ⁴⁹	27 ²⁸	27 ¹⁰	28 ³⁸	9 ³⁶	8 ²¹	11 ²⁰	22 [°] 7	24 ²⁹	11 ³²	12 ⁴⁸	7 ⁴³	5 ¹²	M 25
T 26	20 17 45	3 ⁴⁷ 43	10 [✕] 42	28 ⁵¹	28 ²⁰	29 ¹⁴	9 ⁴⁰	8 ²⁶	11 ¹⁸	22 [°] 9	24 ²⁹	11 ²⁵	12 ⁴⁵	7 ⁵⁰	5 ¹⁷	T 26
W 27	20 21 41	4 ⁴⁵ 02	22 ⁴¹	0 ^{III} 12	29 ³¹	29 ⁵⁰	9 ⁴³	8 ³²	11 ¹⁷	22 ¹¹	24 ²⁹	11 ²¹	12 ⁴¹	7 ⁵⁷	5 ²²	W 27
T 28	20 25 38	5 ⁴² 21	4 ^Υ 47	1 ³¹	0 ^Ω 41	0 ^Δ 26	9 ⁴⁷	8 ³⁷	11 ¹⁵	22 ¹³	24 ²⁹	11 ²⁰	12 ³⁸	8 [°] 3	5 ²⁷	T 28
F 29	20 29 34	6 ³⁹ 41	17 [°] 6	2 ⁴⁸	1 ⁵²	1 [°] 2	9 ⁵¹	8 ⁴³	11 ¹³	22 ¹⁶	24 ²⁹	11 ^D 19	12 ³⁵	8 ¹⁰	5 ³²	F 29
S 30	20 33 31	7 ³⁷ 02	29 ⁴²	4 [°] 2	3 [°] 2	1 ³⁹	9 ⁵⁵	8 ⁴⁸	11 ¹¹	22 ¹⁸	24 ²⁹	11 ²⁰	12 ³²	8 ¹⁷	5 ³⁷	S 30
S 31	20 37 28	8 ^Δ 34'25	12 [✕] 39	5 ^{III} 15	4 ^Ω 13	2 ^Δ 15	10 ^{III} 0	8 ^{II} 53	11 [✕] 9	22 ^Ω 20	24 ^Υ 29	11 ^R 20	12 ^Δ 29	8 [≈] 24	5 ^Ω 42	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	23n 3	3n43	0n32	24n13	1n36	17n47	2s17	6n51	0n53	13s25	1n 9	19n30	1s48	7s51	0s47	14n40	0n18	6s26	17s 3	5s34	5s33	14s20	17n44	5s39	
S 2	22 59	7 33	0s35	24 2	1 40	18 3	2 15	6 37	0 52	13 25	1 9	19 31	1 48	7 51	0 47	14 39	0 18	6 26	17 3	5 34	5 31	14 18	17 44	5 39	
S 3	22 54	11 10	1 42	23 49	1 44	18 18	2 14	6 23	0 51	13 25	1 9	19 32	1 48	7 52	0 47	14 38	0 18	6 26	17 3	5 33	5 30	14 17	17 44	5 40	
M 4	22 49	14 19	2 45	23 34	1 47	18 33	2 12	6 9	0 50	13 25	1 9	19 33	1 48	7 52	0 47	14 38	0 18	6 26	17 4	5 32	5 29	14 16	17 44	5 40	
T 5	22 43	16 46	3 41	23 16	1 49	18 48	2 11	5 55	0 49	13 25	1 8	19 34	1 48	7 52	0 48	14 37	0 18	6 26	17 4	5 30	5 28	14 15	17 43	5 40	
W 6	22 37	18 15	4 25	22 57	1 51	19 2	2 9	5 41	0 48	13 25	1 8	19 35	1 48	7 53	0 48	14 37	0 18	6 27	17 4	5 27	5 27	14 13	17 43	5 40	
T 7	22 30	18 33	4 53	22 35	1 52	19 15	2 7	5 27	0 47	13 26	1 8	19 36	1 48	7 53	0 48	14 36	0 18	6 27	17 5	5 24	5 25	14 12	17 43	5 40	
F 8	22 23	17 33	5 0	22 11	1 52	19 29	2 5	5 12	0 46	13 26	1 8	19 37	1 48	7 54	0 48	14 36	0 18	6 27	17 5	5 19	5 24	14 11	17 42	5 40	
S 9	22 16	15 18	4 47	21 46	1 51	19 41	2 3	4 58	0 45	13 26	1 7	19 38	1 48	7 54	0 48	14 35	0 18	6 27	17 5	5 15	5 23	14 9	17 42	5 40	
S 10	22 9	12 0	4 13	21 19	1 50	19 54	2 1	4 44	0 44	13 27	1 7	19 39	1 49	7 55	0 48	14 34	0 18	6 27	17 6	5 12	5 22	14 8	17 42	5 41	
M 11	22 1	7 59	3 23	20 50	1 48	20 6	1 59	4 29	0 43	13 28	1 7	19 40	1 49	7 55	0 48	14 34	0 18	6 28	17 6	5 9	5 20	14 7	17 41	5 41	
T 12	21 52	3 34	2 20	20 21	1 46	20 17	1 57	4 15	0 43	13 28	1 7	19 41	1 49	7 55	0 48	14 33	0 18	6 28	17 6	5 7	5 19	14 6	17 41	5 41	
W 13	21 44	0s56	1 10	19 50	1 43	20 28	1 55	4 0	0 42	13 29	1 6	19 42	1 49	7 56	0 48	14 32	0 18	6 28	17 7	5 7	5 18	14 4	17 41	5 41	
T 14	21 34	5 15	0n 3	19 18	1 39	20 39	1 53	3 45	0 41	13 29	1 6	19 43	1 49	7 57	0 48	14 32	0 18	6 28	17 7	5 6	5 17	14 3	17 40	5 41	
F 15	21 25	9 11	1 13	18 45	1 35	20 49	1 50	3 31	0 40	13 30	1 6	19 44	1 49	7 57	0 48	14 31	0 18	6 29	17 7	5 6	5 15	14 2	17 40	5 42	
S 16	21 15	12 34	2 17	18 11	1 30	20 58	1 48	3 16	0 39	13 31	1 5	19 45	1 49	7 58	0 48	14 31	0 18	6 29	17 8	5 6	5 14	14 0	17 40	5 42	
S 17	21 5	15 16	3 13	17 37	1 25	21 7	1 46	3 1	0 38	13 32	1 5	19 46	1 49	7 58	0 48	14 30	0 18	6 29	17 8	5 5	5 13	13 59	17 39	5 42	
M 18	20 54	17 11	3 58	17 2	1 19	21 15	1 43	2 46	0 37	13 33	1 5	19 47	1 49	7 59	0 48	14 29	0 18	6 29	17 9	5 3	5 12	13 58	17 39	5 42	
T 19	20 43	18 17	4 32	16 26	1 13	21 23	1 41	2 32	0 36	13 34	1 5	19 48	1 49	7 59	0 48	14 29	0 18	6 30	17 9	5 0	5 11	13 57	17 38	5 42	
W 20	20 32	18 32	4 53	15 50	1 6	21 31	1 38	2 17	0 36	13 35	1 4	19 49	1 49	8 0	0 48	14 28	0 18	6 30	17 9	4 56	5 9	13 55	17 38	5 43	
T 21	20 21	17 57	5 1	15 14	0 59	21 38	1 35	2 2	0 35	13 36	1 4	19 49	1 49	8 1	0 48	14 27	0 18	6 30	17 10	4 51	5 8	13 54	17 38	5 43	
F 22	20 9	16 34	4 56	14 37	0 52	21 44	1 33	1 47	0 34	13 37	1 4	19 50	1 49	8 1	0 48	14 27	0 18	6 31	17 10	4 46	5 7	13 53	17 37	5 43	
S 23	19 56	14 30	4 37	14 0	0 44	21 49	1 30	1 32	0 33	13 38	1 4	19 51	1 50	8 2	0 48	14 26	0 18	6 31	17 10	4 41	5 6	13 51	17 37	5 43	
S 24	19 44	11 49	4 7	13 23	0 35	21 55	1 27	1 17	0 32	13 40	1 3	19 52	1 50	8 2	0 48	14 25	0 18	6 31	17 11	4 37	5 4	13 50	17 36	5 44	
M 25	19 31	8 40	3 26	12 46	0 27	21 59	1 25	1 2	0 31	13 41	1 3	19 53	1 50	8 3	0 48	14 25	0 18	6 32	17 11	4 33	5 3	13 49	17 36	5 44	
T 26	19 17	5 9	2 35	12 9	0 18	22 3	1 22	0 47	0 31	13 42	1 3	19 53	1 50	8 4	0 48	14 24	0 18	6 32	17 11	4 31	5 2	13 47	17 35	5 44	
W 27	19 4	1 25	1 38	11 32	0 9	22 7	1 19	0 31	0 30	13 44	1 3	19 54	1 50	8 4	0 48	14 23	0 18	6 32	17 12	4 29	5 1	13 46	17 35	5 44	
T 28	18 50	2n26	0 35	10 55	0s 1	22 9	1 16	0 16	0 29	13 45	1 2	19 55	1 50	8 5	0 48	14 23	0 18	6 33	17 12	4 29	4 59	13 45	17 34	5 45	
F 29	18 36	6 14	0s31	10 18	0 11	22 12	1 13	0 1	0 28	13 47	1 2	19 56	1 50	8 6	0 48	14 22	0 18	6 33	17 12	4 29	4 58	13 43	17 34	5 45	
S 30	18 21	9 51	1 37	9 42	0 21	22 13	1 10	0s14	0 27	13 48	1 2	19 56	1 50	8 7	0 48	14 21	0 18	6 33	17 13	4 29	4 57	13 42	17 33	5 45	
S 31	18n 6	13n 6	2s39	9n 6	0s31	22n14	1s 7	0s29	0n26	13s50	1n 2	19n57	1s50	8s 7	0s48	14n20	0n18	6s34	17s13	4s29	4s56	13s41	17n33	5s46	

ASTRODIENST EPHEMERIS for the year 2089

geocentric

AUGUST 2089

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	20 41 24	9♏31'48	26♌ 1	6♍25	5♊24	2♊52	10♌ 4	8♏58	11°R 7	22♏22	24°R29	11°R19	12♊26	8♏30	5♊47	M 1
T 2	20 45 21	10°29'13	9♏51	7°32	6°35	3°29	10° 9	9° 3	11°R 6	22°24	24°Y28	11♊16	12°22	8°37	5°52	T 2
W 3	20 49 17	11°26'39	24° 9	8°37	7°46	4° 5	10°14	9° 8	11° 4	22°26	24°28	11°10	12°19	8°44	5°57	W 3
T 4	20 53 14	12°24'05	8♊54	9°40	8°57	4°42	10°19	9°13	11° 2	22°29	24°28	11° 3	12°16	8°50	6° 2	T 4
F 5	20 57 10	13°21'33	23°59	10°39	10° 8	5°19	10°24	9°18	11° 0	22°31	24°28	10°55	12°13	8°57	6° 7	F 5
S 6	21 1 7	14°19'02	9♏15	11°36	11°19	5°56	10°29	9°22	10°58	22°33	24°27	10°46	12°10	9° 4	6°12	S 6
S 7	21 5 3	15°16'32	24°31	12°30	12°30	6°33	10°34	9°27	10°55	22°35	24°27	10°39	12° 7	9°11	6°17	S 7
M 8	21 9 0	16°14'03	9♏36	13°21	13°41	7°10	10°40	9°32	10°53	22°37	24°27	10°33	12° 3	9°17	6°22	M 8
T 9	21 12 57	17°11'35	24°22	14° 9	14°53	7°48	10°46	9°36	10°51	22°40	24°27	10°30	12° 0	9°24	6°26	T 9
W10	21 16 53	18° 9'07	8♊43	14°53	16° 4	8°25	10°52	9°41	10°49	22°42	24°26	10°D29	11°57	9°31	6°31	W10
T 11	21 20 50	19° 6'41	22°36	15°33	17°16	9° 2	10°58	9°45	10°47	22°44	24°26	10°30	11°54	9°37	6°36	T 11
F 12	21 24 46	20° 4'15	6♏ 2	16°10	18°27	9°40	11° 4	9°49	10°45	22°46	24°25	10°31	11°51	9°44	6°40	F 12
S 13	21 28 43	21° 1'50	19° 4	16°43	19°39	10°17	11°10	9°53	10°43	22°49	24°25	10°R31	11°47	9°51	6°45	S 13
S 14	21 32 39	21°59'26	1♊44	17°12	20°51	10°55	11°16	9°57	10°40	22°51	24°25	10°31	11°44	9°58	6°49	S 14
M15	21 36 36	22°57'03	14° 7	17°36	22° 2	11°33	11°23	10° 1	10°38	22°53	24°24	10°29	11°41	10° 4	6°54	M15
T 16	21 40 32	23°54'41	26°18	17°56	23°14	12°10	11°30	10° 5	10°36	22°55	24°24	10°24	11°38	10°11	6°58	T 16
W17	21 44 29	24°52'20	8♊19	18°10	24°26	12°48	11°37	10° 9	10°34	22°57	24°23	10°18	11°35	10°18	7° 3	W17
T 18	21 48 26	25°50'00	20°14	18°20	25°38	13°26	11°44	10°13	10°31	23° 0	24°23	10°11	11°32	10°24	7° 7	T 18
F 19	21 52 22	26°47'41	2♊ 7	18°R24	26°50	14° 4	11°51	10°16	10°29	23° 2	24°22	10° 3	11°28	10°31	7°11	F 19
S 20	21 56 19	27°45'23	13°59	18°23	28° 2	14°42	11°58	10°20	10°27	23° 4	24°22	9°55	11°25	10°38	7°15	S 20
S 21	22 0 15	28°43'07	25°51	18°17	29°14	15°20	12° 5	10°23	10°24	23° 6	24°21	9°48	11°22	10°44	7°20	S 21
M22	22 4 12	29°40'52	7♏47	18° 4	0♏26	15°59	12°13	10°27	10°22	23° 9	24°21	9°42	11°19	10°51	7°24	M22
T 23	22 8 8	0♏38'38	19°47	17°46	1°39	16°37	12°21	10°30	10°20	23°11	24°20	9°38	11°16	10°58	7°28	T 23
W24	22 12 5	1°36'26	1♏53	17°22	2°51	17°15	12°28	10°33	10°17	23°13	24°19	9°36	11°13	11° 5	7°32	W24
T 25	22 16 1	2°34'15	14° 9	16°52	4° 3	17°54	12°36	10°36	10°15	23°15	24°19	9°D36	11° 9	11°11	7°36	T 25
F 26	22 19 58	3°32'07	26°36	16°17	5°16	18°32	12°44	10°39	10°13	23°17	24°18	9°37	11° 6	11°18	7°40	F 26
S 27	22 23 55	4°29'59	9♏17	15°37	6°28	19°11	12°52	10°42	10°10	23°20	24°17	9°39	11° 3	11°25	7°44	S 27
S 28	22 27 51	5°27'54	22°17	14°51	7°41	19°50	13° 1	10°45	10° 8	23°22	24°17	9°40	11° 0	11°31	7°47	S 28
M29	22 31 48	6°25'50	5♏37	14° 2	8°53	20°28	13° 9	10°47	10° 6	23°24	24°16	9°R41	10°57	11°38	7°51	M29
T 30	22 35 44	7°23'49	19°20	13°10	10° 6	21° 7	13°18	10°50	10° 3	23°26	24°15	9°40	10°53	11°45	7°55	T 30
W31	22 39 41	8♏21'49	3♊27	12♏15	11♏19	21♊46	13♏26	10♏52	10♏ 1	23♏28	24°Y15	9♊38	10♊50	11♏51	7♊59	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	17n51	15n46	3s35	8n31	0s42	22n15	1s 4	0s45	0n26	13s51	1n 1	19n58	1s50	8s 8	0s48	14n20
T 2	17 36	17 37	4 21	7 56	0 52	22 14	1 1	1 0	0 25	13 53	1 1	19 58	1 51	8 9	0 48	14 19
W 3	17 20	18 26	4 52	7 21	1 3	22 14	0 58	1 15	0 24	13 55	1 1	19 59	1 51	8 10	0 48	14 18
T 4	17 4	18 3	5 5	6 48	1 14	22 12	0 55	1 31	0 23	13 57	1 1	20 0	1 51	8 10	0 48	14 18
F 5	16 48	16 25	4 57	6 15	1 26	22 10	0 52	1 46	0 22	13 58	1 0	20 0	1 51	8 11	0 48	14 17
S 6	16 32	13 37	4 29	5 43	1 37	22 8	0 49	2 1	0 22	14 0	1 0	20 1	1 51	8 12	0 48	14 16
S 7	16 15	9 52	3 41	5 12	1 48	22 4	0 46	2 17	0 21	14 2	1 0	20 1	1 51	8 13	0 48	14 16
M 8	15 58	5 31	2 38	4 42	2 0	22 0	0 43	2 32	0 20	14 4	1 0	20 2	1 51	8 14	0 48	14 15
T 9	15 40	0 56	1 26	4 13	2 11	21 56	0 40	2 48	0 19	14 6	0 59	20 3	1 51	8 14	0 48	14 14
W10	15 23	3s36	0 10	3 45	2 23	21 51	0 37	3 3	0 19	14 8	0 59	20 3	1 51	8 15	0 49	14 13
T 11	15 5	7 47	1n 5	3 19	2 34	21 45	0 34	3 18	0 18	14 10	0 59	20 4	1 52	8 16	0 49	14 13
F 12	14 47	11 26	2 13	2 54	2 46	21 39	0 31	3 34	0 17	14 12	0 59	20 4	1 52	8 17	0 49	14 12
S 13	14 29	14 23	3 13	2 31	2 57	21 32	0 28	3 49	0 16	14 15	0 58	20 5	1 52	8 18	0 49	14 11
S 14	14 10	16 34	4 1	2 10	3 8	21 24	0 25	4 5	0 15	14 17	0 58	20 5	1 52	8 19	0 49	14 11
M15	13 52	17 54	4 36	1 51	3 19	21 16	0 22	4 20	0 15	14 19	0 58	20 5	1 52	8 19	0 49	14 10
T 16	13 33	18 24	4 59	1 33	3 29	21 7	0 19	4 36	0 14	14 21	0 58	20 6	1 52	8 20	0 49	14 9
W17	13 13	18 4	5 8	1 18	3 40	20 58	0 16	4 51	0 13	14 24	0 58	20 6	1 52	8 21	0 49	14 8
T 18	12 54	16 54	5 3	1 5	3 49	20 48	0 13	5 7	0 12	14 26	0 57	20 7	1 52	8 22	0 49	14 8
F 19	12 34	15 2	4 46	0 55	3 58	20 37	0 10	5 22	0 12	14 28	0 57	20 7	1 53	8 23	0 49	14 7
S 20	12 15	12 32	4 16	0 48	4 7	20 26	0 7	5 37	0 11	14 31	0 57	20 7	1 53	8 24	0 49	14 6
S 21	11 55	9 31	3 35	0 44	4 14	20 14	0 4	5 53	0 10	14 33	0 57	20 8	1 53	8 25	0 49	14 6
M22	11 35	6 6	2 44	0 42	4 21	20 2	0 1	6 8	0 9	14 36	0 56	20 8	1 53	8 26	0 49	14 5
T 23	11 14	2 25	1 46	0 44	4 27	19 49	0n 2	6 24	0 9	14 38	0 56	20 8	1 53	8 26	0 49	14 4
W24	10 54	1n24	0 42	0 49	4 31	19 36	0 5	6 39	0 8	14 41	0 56	20 9	1 53	8 27	0 49	14 3
T 25	10 33	5 12	0s25	0 58	4 35	19 22	0 8	6 54	0 7	14 44	0 56	20 9	1 53	8 28	0 49	14 3
F 26	10 12	8 50	1 31	1 10	4 36	19 7	0 11	7 10	0 7	14 46	0 56	20 9	1 54	8 29	0 49	14 2
S 27	9 51	12 8	2 35	1 25	4 36	18 52	0 14	7 25	0 6	14 49	0 55	20 10	1 54	8 30	0 49	14 1
S 28	9 30	14 54	3 32	1 44	4 35	18 36	0 17	7 40	0 5	14 51	0 55	20 10	1 54	8 31	0 49	14 1
M29	9 9	16 58	4 19	2 6	4 31	18 20	0 19	7 56	0 4	14 54	0 55	20 10	1 54	8 32	0 49	14 0
T 30	8 47	18 7	4 54	2 31	4 26	18 3	0 22	8 11	0 4	14 57	0 55	20 10	1 54	8 33	0 49	13 59
W31	8n26	18n12	5s11	2n58	4s19	17n46	0n25	8s26	0n 3	15s 0	0n55	20n11	1s54	8s34	0s49	13n58

Julian Day Number = 2484264.5, Delta T = 88.58 sec
 Ecliptic obliquity = 23°25'30, Nutation = 0°00'05, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 25°59'31, Lahiri = 25°06'31

ASTRODIENST EPHEMERIS for the year 2089

geocentric

SEPTEMBER 2089

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 43 37	9 ^h 19'51	17 ^h 57	11 ^h R19	12 ^h Ω32	22 ^h ♂25	13 ^h ♂35	10 ^h ♂55	9 ^h R58	23 ^h Ω30	24 ^h R14	9 ^h R35	10 ^h ♂47	11 ^h ♂58	8 ^h ♂2	T 1
F 2	22 47 34	10 ^h 17'55	2 ^h Ω46	10 ^h ♂22	13 ^h 45	23 ^h 4	13 ^h 44	10 ^h 57	9 ^h ♂56	23 ^h 33	24 ^h ♂13	9 ^h ♂31	10 ^h 44	12 ^h 5	8 ^h 6	F 2
S 3	22 51 30	11 ^h 16'01	17 ^h 48	9 ^h 26	14 ^h 57	23 ^h 43	13 ^h 53	10 ^h 59	9 ^h 54	23 ^h 35	24 ^h 12	9 ^h 27	10 ^h 41	12 ^h 12	8 ^h 9	S 3
S 4	22 55 27	12 ^h 14'08	2 ^h ♂53	8 ^h 33	16 ^h 10	24 ^h 22	14 ^h 2	11 ^h 1	9 ^h 51	23 ^h 37	24 ^h 11	9 ^h 24	10 ^h 38	12 ^h 18	8 ^h 12	S 4
M 5	22 59 24	13 ^h 12'18	17 ^h 53	7 ^h 43	17 ^h 23	25 ^h 2	14 ^h 11	11 ^h 3	9 ^h 49	23 ^h 39	24 ^h 11	9 ^h 21	10 ^h 34	12 ^h 25	8 ^h 16	M 5
T 6	23 3 20	14 ^h 10'29	2 ^h ♂37	6 ^h 57	18 ^h 37	25 ^h 41	14 ^h 20	11 ^h 5	9 ^h 46	23 ^h 41	24 ^h 10	9 ^h D20	10 ^h 31	12 ^h 32	8 ^h 19	T 6
W 7	23 7 17	15 ^h 8'41	17 ^h 1	6 ^h 17	19 ^h 50	26 ^h 21	14 ^h 30	11 ^h 7	9 ^h 44	23 ^h 43	24 ^h 9	9 ^h 20	10 ^h 28	12 ^h 38	8 ^h 22	W 7
T 8	23 11 13	16 ^h 6'55	1 ^h ♂ 0	5 ^h 44	21 ^h 3	27 ^h 0	14 ^h 39	11 ^h 8	9 ^h 42	23 ^h 45	24 ^h 8	9 ^h 21	10 ^h 25	12 ^h 45	8 ^h 25	T 8
F 9	23 15 10	17 ^h 5'11	14 ^h 33	5 ^h 18	22 ^h 16	27 ^h 40	14 ^h 49	11 ^h 10	9 ^h 39	23 ^h 47	24 ^h 7	9 ^h 23	10 ^h 22	12 ^h 52	8 ^h 28	F 9
S 10	23 19 6	18 ^h 3'28	27 ^h 40	5 ^h 0	23 ^h 29	28 ^h 19	14 ^h 59	11 ^h 11	9 ^h 37	23 ^h 49	24 ^h 6	9 ^h 24	10 ^h 18	12 ^h 58	8 ^h 31	S 10
S 11	23 23 3	19 ^h 1'47	10 ^h ♂24	4 ^h 51	24 ^h 43	28 ^h 59	15 ^h 8	11 ^h 13	9 ^h 35	23 ^h 51	24 ^h 5	9 ^h 25	10 ^h 15	13 ^h 5	8 ^h 34	S 11
M 12	23 26 59	20 ^h 0'07	22 ^h 49	4 ^h D51	25 ^h 56	29 ^h 39	15 ^h 18	11 ^h 14	9 ^h 32	23 ^h 54	24 ^h 5	9 ^h R25	10 ^h 12	13 ^h 12	8 ^h 37	M 12
T 13	23 30 56	20 ^h 58'29	5 ^h ♂ 0	5 ^h 0	27 ^h 10	0 ^h ♂19	15 ^h 28	11 ^h 15	9 ^h 30	23 ^h 56	24 ^h 4	9 ^h 24	10 ^h 9	13 ^h 19	8 ^h 40	T 13
W 14	23 34 52	21 ^h 56'52	16 ^h 59	5 ^h 18	28 ^h 23	0 ^h 59	15 ^h 38	11 ^h 16	9 ^h 27	23 ^h 58	24 ^h 3	9 ^h 23	10 ^h 6	13 ^h 25	8 ^h 43	W 14
T 15	23 38 49	22 ^h 55'17	28 ^h 53	5 ^h 45	29 ^h 37	1 ^h 38	15 ^h 49	11 ^h 17	9 ^h 25	24 ^h 0	24 ^h 2	9 ^h 21	10 ^h 3	13 ^h 32	8 ^h 45	T 15
F 16	23 42 46	23 ^h 53'44	10 ^h ♂44	6 ^h 22	0 ^h ♂50	2 ^h 19	15 ^h 59	11 ^h 18	9 ^h 23	24 ^h 2	24 ^h 1	9 ^h 19	9 ^h 59	13 ^h 39	8 ^h 48	F 16
S 17	23 46 42	24 ^h 52'12	22 ^h 37	7 ^h 6	2 ^h 4	2 ^h 59	16 ^h 9	11 ^h 18	9 ^h 21	24 ^h 4	24 ^h 0	9 ^h 16	9 ^h 56	13 ^h 45	8 ^h 51	S 17
S 18	23 50 39	25 ^h 50'42	4 ^h ♂33	7 ^h 59	3 ^h 18	3 ^h 39	16 ^h 20	11 ^h 19	9 ^h 18	24 ^h 6	23 ^h 59	9 ^h 14	9 ^h 53	13 ^h 52	8 ^h 53	S 18
M 19	23 54 35	26 ^h 49'14	16 ^h 35	8 ^h 59	4 ^h 31	4 ^h 19	16 ^h 30	11 ^h 19	9 ^h 16	24 ^h 7	23 ^h 58	9 ^h 13	9 ^h 50	13 ^h 59	8 ^h 55	M 19
T 20	23 58 32	27 ^h 47'47	28 ^h 46	10 ^h 6	5 ^h 45	5 ^h 0	16 ^h 41	11 ^h 20	9 ^h 14	24 ^h 9	23 ^h 57	9 ^h 12	9 ^h 47	14 ^h 5	8 ^h 58	T 20
W 21	0 2 28	28 ^h 46'23	11 ^h ♂ 6	11 ^h 20	6 ^h 59	5 ^h 40	16 ^h 52	11 ^h 20	9 ^h 12	24 ^h 11	23 ^h 56	9 ^h D12	9 ^h 44	14 ^h 12	9 ^h 0	W 21
T 22	0 6 25	29 ^h 45'00	23 ^h 37	12 ^h 40	8 ^h 13	6 ^h 20	17 ^h 2	11 ^h 20	9 ^h 9	24 ^h 13	23 ^h 55	9 ^h 12	9 ^h 40	14 ^h 19	9 ^h 2	T 22
F 23	0 10 21	0 ^h ♂43'40	6 ^h ♂20	14 ^h 5	9 ^h 27	7 ^h 1	17 ^h 13	11 ^h R20	9 ^h 7	24 ^h 15	23 ^h 54	9 ^h 13	9 ^h 37	14 ^h 26	9 ^h 4	F 23
S 24	0 14 18	1 ^h 42'22	19 ^h 17	15 ^h 34	10 ^h 41	7 ^h 42	17 ^h 24	11 ^h 20	9 ^h 5	24 ^h 17	23 ^h 53	9 ^h 14	9 ^h 34	14 ^h 32	9 ^h 6	S 24
S 25	0 18 15	2 ^h 41'06	2 ^h ♂28	17 ^h 7	11 ^h 55	8 ^h 22	17 ^h 35	11 ^h 20	9 ^h 3	24 ^h 19	23 ^h 52	9 ^h 14	9 ^h 31	14 ^h 39	9 ^h 8	S 25
M 26	0 22 11	3 ^h 39'52	15 ^h 55	18 ^h 44	13 ^h 9	9 ^h 3	17 ^h 46	11 ^h 19	9 ^h 1	24 ^h 21	23 ^h 51	9 ^h 15	9 ^h 28	14 ^h 46	9 ^h 10	M 26
T 27	0 26 8	4 ^h 38'40	29 ^h 39	20 ^h 24	14 ^h 23	9 ^h 44	17 ^h 58	11 ^h 19	8 ^h 59	24 ^h 22	23 ^h 49	9 ^h R15	9 ^h 24	14 ^h 52	9 ^h 12	T 27
W 28	0 30 4	5 ^h 37'31	13 ^h ♂38	22 ^h 5	15 ^h 37	10 ^h 25	18 ^h 9	11 ^h 18	8 ^h 57	24 ^h 24	23 ^h 48	9 ^h 15	9 ^h 21	14 ^h 59	9 ^h 13	W 28
T 29	0 34 1	6 ^h 36'24	27 ^h 54	23 ^h 49	16 ^h 51	11 ^h 6	18 ^h 20	11 ^h 18	8 ^h 55	24 ^h 26	23 ^h 47	9 ^h 15	9 ^h 18	15 ^h 6	9 ^h 15	T 29
F 30	0 37 57	7 ^h ♂35'20	12 ^h Ω22	25 ^h ♂34	18 ^h ♂ 5	11 ^h ♂47	18 ^h ♂32	11 ^h ♂17	8 ^h ♂53	24 ^h Ω28	23 ^h ♂46	9 ^h ♂15	9 ^h ♂15	15 ^h ♂12	9 ^h ♂17	F 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	8n 4	17n 6	5s10	3n28	4s10	17n28	0n27	8s41	0n 2	15s 3	0n54	20n11	1s54	8s35	0s49	13n58	0n18	6s48	17s23	3s48	4s16	12s57	17n13	5s58			
F 2	7 42	14 51	4 48	4 0	3 58	17 10	0 30	8 56	0 1	15 5	0 54	20 11	1 55	8 36	0 49	13 57	0 18	6 49	17 23	3 46	4 15	12 56	17 12	5 59			
S 3	7 20	11 35	4 6	4 32	3 46	16 51	0 33	9 11	0 1	15 8	0 54	20 11	1 55	8 36	0 49	13 56	0 18	6 49	17 23	3 45	4 13	12 55	17 12	5 59			
S 4	6 58	7 32	3 7	5 6	3 31	16 32	0 35	9 27	0 0	15 11	0 54	20 11	1 55	8 37	0 49	13 56	0 18	6 50	17 24	3 43	4 12	12 53	17 11	6 0			
M 5	6 36	3 1	1 55	5 39	3 15	16 13	0 38	9 42	0s 1	15 14	0 54	20 11	1 55	8 38	0 49	13 55	0 18	6 50	17 24	3 42	4 11	12 52	17 10	6 0			
T 6	6 13	1s36	0 37	6 12	2 58	15 52	0 40	9 57	0 1	15 17	0 53	20 11	1 55	8 39	0 49	13 54	0 18	6 51	17 24	3 42	4 10	12 51	17 10	6 1			
W 7	5 51	6 2	0n42	6 43	2 40	15 32	0 42	10 11	0 2	15 20	0 53	20 11	1 55	8 40	0 49	13 54	0 18	6 51	17 24	3 42	4 9	12 49	17 9	6 1			
T 8	5 28	10 0	1 57	7 13	2 21	15 11	0 45	10 26	0 3	15 23	0 53	20 12	1 55	8 41	0 49	13 53	0 18	6 52	17 25	3 42	4 7	12 48	17 8	6 2			
F 9	5 6	13 18	3 2	7 40	2 2	14 49	0 47	10 41	0 3	15 26	0 53	20 12	1 56	8 42	0 49	13 52	0 18	6 52	17 25	3 43	4 6	12 46	17 8	6 2			
S 10	4 43	15 48	3 56	8 5	1 43	14 28	0 49	10 56	0 4	15 29	0 53	20 12	1 56	8 43	0 49	13 52	0 18	6 53	17 25	3 43	4 5	12 45	17 7	6 3			
S 11	4 20	17 26	4 36	8 26	1 23	14 5	0 52	11 11	0 5	15 32	0 53	20 12	1 56	8 44	0 49	13 51	0 18	6 53	17 25	3 44	4 4	12 44	17 6	6 3			
M 12	3 57	18 12	5 3	8 44	1 4	13 43	0 54	11 26	0 5	15 35	0 52	20 12	1 56	8 44	0 49	13 50	0 18	6 54	17 26	3 44	4 2	12 42	17 5	6 4			
T 13	3 35	18 5	5 15	8 58	0 46	13 19	0 56	11 40	0 6	15 38	0 52	20 12	1 56	8 45	0 49	13 50	0 18	6 54	17 26	3 44	4 1	12 41	17 5	6 5			
W 14	3 12	17 10	5 13	9 8	0 28	12 56	0 58	11 55	0 7	15 41	0 52	20 12	1 56	8 46	0 49	13 49	0 18	6 55	17 26	3 43	4 0	12 39	17 4	6 5			
T 15	2 48	15 31	4 58	9 14	0 11	12 32	1 0	12 9	0 7	15 44	0 52	20 12	1 57	8 47	0 49	13 48	0 18	6 55	17 26	3 42	3 59	12 38	17 3	6 6			
F 16	2 25	13 12	4 30	9 16	0n 6	12 8	1 2	12 24	0 8	15 47	0 52	20 12	1 57	8 48	0 49	13 48	0 18	6 56	17 26	3 41	3 57	12 37	17 3	6 6			
S 17	2 2	10 20	3 50	9 13	0 21	11 43	1 4	12 38	0 9	15 50	0 51	20 12	1 57	8 49	0 49	13 47	0 18	6 56	17 26	3 40	3 56	12 35	17 2	6 7			
S 18	1 39	7 2	3 0	9 7	0 35	11 19	1 6	12 52	0 9	15 54	0 51	20 12	1 57	8 50	0 49	13 46	0 18	6 57	17 27	3 40	3 55	12 34	17 1	6 7			
M 19	1 16	3 25	2 2	8 56	0 48	10 53	1 7	13 7	0 10	15 57	0 51	20 11	1 57	8 50	0 49	13 46	0 18	6 57	17 27	3 39	3 54	12 32	17 0	6 8			
T 20	0 53	0n23	0 58	8 41	0 49	10 28	1 9	13 21	0 11	16 0	0 51	20 11	1 57	8 51	0 49	13 45	0 18	6 58	17 27	3 39	3 52	12 31	17 0	6 8			
W 21	0 29	4 14	0s11	8 23	1 10	10 2	1 11	13 35	0 11	16 3	0 51	20 11	1 57	8 52	0 49	13 44	0 18	6 58	17 27	3 39	3 51	12 29	16 59	6 9			
T 22	0 6	7 56	1 19	8 1	1 19	9 36	1 12	13 49	0 12	16 6	0 51	20 11	1 58	8 53	0 49	13 44	0 18	6 59	17 27	3 39	3 50	12 28	16 58	6 10			
F 23	0s17	11 21	2 25	7 36	1 27	9 10	1 14	14 3	0 13	16 10	0 50	20 11	1 58	8 54	0 49	13 43	0 18	6 59	17 27	3 39	3 49	12 27	16 58	6 10			
S 24	0 41	14 15	3 25	7 8	1 34	8 43	1 15	14 17	0 13	16 13	0 50	20 11	1 58	8 55	0 49	13 43	0 18	7 0	17 28	3 39	3 47	12 25	16 57	6 11			
S 25	1 4	16 29	4 15	6 37	1 40	8 16	1 17	14 31	0 14	16 16	0 50	20 11	1 58	8 55	0 49	13 42	0 19	7 0	17 28	3 40	3 46	12 24	16 56	6 11			
M 26	1 27	17 51	4 52	6 3	1 44	7 49	1 18	14 44	0 15	16 19	0 50	20 10	1 58	8 56	0 48	13 41	0 19	7 1	17 28	3 40	3 45	12 22	16 56	6 12			
T 27	1 51	18 13	5 13	5 28	1 48	7 22	1 19	14 58	0 15	16 22	0 50	20 10	1 58	8 57	0 48	13 41	0 19	7 1	17 28	3 40	3 44	12 21	16 55	6 12			
W 28	2 14	17 29	5 16	4 50	1 51	6 54	1 20	15 11	0 16	16 26	0 50	20 10	1 58	8 58	0 48	13 40	0 19	7 2	17 28	3 40	3 42	12 20	16 54	6 13			
T 29	2 37	15 39	5 1	4 10	1 52	6 26	1 21	15 25	0 17	16 29	0 50	20 10	1 58	8 58	0 48	13 40	0 19	7 2	17 28	3 40	3 41	12 18	16 53	6 14			
F 30	3s 1	12n49	4s26	3n29	1n53	5n58	1n22	15s38	0s17	16s32	0n49	20n10	1s59	8s59	0s48	13n39	0n19	7s 3	17s28	3s40	3s40	12s17	16n53	6s14			

ASTRODIENST EPHEMERIS for the year 2089

geocentric

OCTOBER 2089

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 41 54	8♂34'17	26♂59	27♂20	19♂20	12♂28	18♂43	11°R16	8°R51	24♂29	23°R45	9°R14	9♂12	15♂19	9♂18	S 1
S 2	0 45 50	9°33'17	11♂40	29° 7	20°34	13° 9	18°55	11♂15	8♂49	24°31	23°Y44	9°D14	9° 9	15°26	9°19	S 2
M 3	0 49 47	10°32'19	26°19	0♂55	21°48	13°50	19° 6	11°14	8°47	24°33	23°43	9♂14	9° 5	15°33	9°21	M 3
T 4	0 53 44	11°31'23	10♂49	2°42	23° 3	14°32	19°18	11°13	8°45	24°34	23°42	9°R15	9° 2	15°39	9°22	T 4
W 5	0 57 40	12°30'29	25° 4	4°30	24°17	15°13	19°30	11°11	8°43	24°36	23°41	9°14	8°59	15°46	9°23	W 5
T 6	1 1 37	13°29'38	8♂59	6°18	25°32	15°55	19°42	11°10	8°41	24°38	23°40	9°14	8°56	15°53	9°24	T 6
F 7	1 5 33	14°28'48	22°32	8° 5	26°46	16°36	19°53	11° 9	8°39	24°39	23°38	9°14	8°53	15°59	9°25	F 7
S 8	1 9 30	15°28'00	5♂42	9°52	28° 1	17°18	20° 5	11° 7	8°38	24°41	23°37	9°13	8°50	16° 6	9°26	S 8
S 9	1 13 26	16°27'13	18°30	11°39	29°15	17°59	20°17	11° 5	8°36	24°42	23°36	9°12	8°46	16°13	9°27	S 9
M10	1 17 23	17°26'29	0♂59	13°25	0♂30	18°41	20°30	11° 3	8°34	24°44	23°35	9°11	8°43	16°19	9°27	M10
T 11	1 21 19	18°25'46	13°11	15°10	1°45	19°23	20°42	11° 1	8°32	24°45	23°34	9°D11	8°40	16°26	9°28	T 11
W12	1 25 16	19°25'05	25°11	16°55	2°59	20° 5	20°54	10°59	8°31	24°47	23°33	9°11	8°37	16°33	9°29	W12
T 13	1 29 12	20°24'26	7♂ 5	18°40	4°14	20°47	21° 6	10°57	8°29	24°48	23°32	9°11	8°34	16°39	9°29	T 13
F 14	1 33 9	21°23'49	18°56	20°23	5°29	21°29	21°18	10°55	8°28	24°50	23°30	9°12	8°30	16°46	9°29	F 14
S 15	1 37 6	22°23'13	0♂49	22° 6	6°43	22°11	21°31	10°53	8°26	24°51	23°29	9°14	8°27	16°53	9°30	S 15
S 16	1 41 2	23°22'39	12°49	23°48	7°58	22°53	21°43	10°50	8°25	24°52	23°28	9°15	8°24	17° 0	9°30	S 16
M17	1 44 59	24°22'07	24°58	25°30	9°13	23°35	21°56	10°48	8°23	24°54	23°27	9°16	8°21	17° 6	9°30	M17
T 18	1 48 55	25°21'37	7°Y19	27°11	10°28	24°18	22° 8	10°45	8°22	24°55	23°26	9°R16	8°18	17°13	9°R30	T 18
W19	1 52 52	26°21'09	19°55	28°51	11°43	25° 0	22°21	10°42	8°20	24°56	23°25	9°16	8°15	17°20	9°30	W19
T 20	1 56 48	27°20'43	2♂46	0♂31	12°57	25°42	22°33	10°40	8°19	24°58	23°24	9°15	8°11	17°26	9°30	T 20
F 21	2 0 45	28°20'19	15°52	2° 9	14°12	26°25	22°46	10°37	8°18	24°59	23°22	9°13	8° 8	17°33	9°30	F 21
S 22	2 4 41	29°19'57	29°13	3°48	15°27	27° 7	22°58	10°34	8°16	25° 0	23°21	9°10	8° 5	17°40	9°30	S 22
S 23	2 8 38	0♂19'37	12♂47	5°25	16°42	27°50	23°11	10°31	8°15	25° 1	23°20	9° 7	8° 2	17°46	9°29	S 23
M24	2 12 35	1°19'20	26°32	7° 3	17°57	28°33	23°24	10°28	8°14	25° 2	23°19	9° 4	7°59	17°53	9°29	M24
T 25	2 16 31	2°19'04	10♂27	8°39	19°12	29°15	23°37	10°24	8°13	25° 3	23°18	9° 2	7°55	18° 0	9°28	T 25
W26	2 20 28	3°18'51	24°29	10°15	20°27	29°58	23°49	10°21	8°12	25° 4	23°17	9° 0	7°52	18° 6	9°28	W26
T 27	2 24 24	4°18'40	8♂38	11°50	21°42	0♂41	24° 2	10°17	8°11	25° 5	23°16	9°D 0	7°49	18°13	9°27	T 27
F 28	2 28 21	5°18'32	22°50	13°25	22°57	1°24	24°15	10°14	8°10	25° 6	23°14	9° 1	7°46	18°20	9°26	F 28
S 29	2 32 17	6°18'25	7♂ 4	15° 0	24°12	2° 7	24°28	10°10	8° 9	25° 7	23°13	9° 2	7°43	18°27	9°25	S 29
S 30	2 36 14	7°18'21	21°18	16°34	25°28	2°50	24°41	10° 7	8° 8	25° 8	23°12	9° 4	7°40	18°33	9°24	S 30
M31	2 40 10	8♂18'19	5♂29	18♂ 7	26♂43	3♂33	24♂54	10♂ 3	8♂ 7	25♂ 9	23°Y11	9°R 5	7♂36	18♂40	9♂23	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	3s24	9n10	3s34	2n47	1n53	5n30	1n23	15s51	0s18	16s36	0n49	20n 9	1s59	9s 0	0s48	13n39
S 2	3 47	4 55	2 27	2 4	1 52	5 2	1 24	16 4	0 19	16 39	0 49	20 9	1 59	9 1	0 48	13 38
M 3	4 10	0 22	1 11	1 20	1 51	4 33	1 25	16 17	0 19	16 42	0 49	20 9	1 59	9 1	0 48	13 38
T 4	4 33	4s 9	0n 9	0 35	1 49	4 4	1 26	16 30	0 20	16 46	0 49	20 8	1 59	9 2	0 48	13 37
W 5	4 56	8 21	1 27	0s10	1 46	3 36	1 27	16 43	0 20	16 49	0 49	20 8	1 59	9 3	0 48	13 36
T 6	5 19	11 59	2 38	0 55	1 43	3 7	1 27	16 56	0 21	16 52	0 49	20 8	1 59	9 3	0 48	13 36
F 7	5 42	14 53	3 38	1 41	1 39	2 38	1 28	17 8	0 22	16 55	0 48	20 8	2 0	9 4	0 48	13 35
S 8	6 5	16 54	4 25	2 27	1 35	2 9	1 28	17 21	0 22	16 59	0 48	20 7	2 0	9 5	0 48	13 35
S 9	6 28	18 0	4 57	3 12	1 31	1 39	1 29	17 33	0 23	17 2	0 48	20 7	2 0	9 5	0 48	13 34
M10	6 51	18 11	5 14	3 58	1 26	1 10	1 29	17 45	0 23	17 5	0 48	20 6	2 0	9 6	0 48	13 34
T 11	7 13	17 32	5 16	4 44	1 21	0 41	1 29	17 57	0 24	17 9	0 48	20 6	2 0	9 6	0 48	13 33
W12	7 36	16 5	5 5	5 29	1 16	0 11	1 30	18 9	0 25	17 12	0 48	20 6	2 0	9 7	0 48	13 33
T 13	7 58	13 58	4 40	6 14	1 10	0s18	1 30	18 21	0 25	17 15	0 48	20 5	2 0	9 8	0 48	13 33
F 14	8 20	11 16	4 4	6 58	1 4	0 48	1 30	18 32	0 26	17 19	0 48	20 5	2 0	9 8	0 48	13 32
S 15	8 43	8 6	3 17	7 42	0 58	1 17	1 30	18 44	0 26	17 22	0 47	20 4	2 1	9 9	0 48	13 32
S 16	9 5	4 34	2 21	8 26	0 52	1 47	1 30	18 55	0 27	17 25	0 47	20 4	2 1	9 9	0 48	13 31
M17	9 26	0 48	1 18	9 9	0 46	2 16	1 30	19 6	0 28	17 29	0 47	20 4	2 1	9 10	0 48	13 31
T 18	9 48	3n 4	0 11	9 51	0 39	2 46	1 30	19 17	0 28	17 32	0 47	20 3	2 1	9 10	0 48	13 30
W19	10 10	6 53	0s59	10 33	0 33	3 15	1 29	19 28	0 29	17 35	0 47	20 3	2 1	9 11	0 48	13 30
T 20	10 31	10 27	2 6	11 14	0 26	3 45	1 29	19 39	0 29	17 39	0 47	20 2	2 1	9 11	0 48	13 30
F 21	10 53	13 34	3 8	11 55	0 20	4 14	1 29	19 49	0 30	17 42	0 47	20 2	2 1	9 12	0 48	13 29
S 22	11 14	16 2	4 2	12 34	0 13	4 44	1 28	20 0	0 30	17 45	0 47	20 1	2 1	9 12	0 48	13 29
S 23	11 35	17 39	4 42	13 14	0 6	5 13	1 28	20 10	0 31	17 49	0 46	20 1	2 1	9 13	0 48	13 28
M24	11 56	18 16	5 7	13 52	0s 1	5 42	1 27	20 20	0 32	17 52	0 46	20 0	2 1	9 13	0 48	13 28
T 25	12 16	17 47	5 14	14 30	0 8	6 11	1 26	20 30	0 32	17 55	0 46	19 59	2 1	9 13	0 48	13 28
W26	12 37	16 14	5 3	15 7	0 14	6 40	1 26	20 40	0 33	17 58	0 46	19 59	2 2	9 14	0 48	13 27
T 27	12 57	13 41	4 34	15 43	0 21	7 9	1 25	20 49	0 33	18 2	0 46	19 58	2 2	9 14	0 48	13 27
F 28	13 17	10 19	3 47	16 18	0 28	7 37	1 24	20 59	0 34	18 5	0 46	19 58	2 2	9 14	0 48	13 27
S 29	13 37	6 20	2 47	16 53	0 35	8 6	1 23	21 8	0 34	18 8	0 46	19 57	2 2	9 15	0 48	13 26
S 30	13 57	1 58	1 36	17 26	0 41	8 34	1 22	21 17	0 35	18 11	0 46	19 57	2 2	9 15	0 48	13 26
M31	14s16	2s29	0s20	17s59	0s48	9s 2	1n21	21s26	0s35	18s15	0n46	19n56	2s 2	9s15	0s48	13n26

Julian Day Number = 2484325.5, Delta T = 88.65 sec
 Ecliptic obliquity = 23°25'31, Nutation = 0°00'02, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 25°59'39, Lahiri = 25°06'40

ASTRODIENST EPHEMERIS for the year 2089
geocentric

DECEMBER 2089

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	4 42 24	9♌30'59	25♍51	0♋58	5♊38	26♌21	1♌45	7°R42	8♏6	25°R21	22°R42	7°R26	5♎58	22♏7	8°R14	T 1
F 2	4 46 20	10°31'48	8♌56	1°54	6°54	27°6	1°58	7♏37	8°7	25°R21	22°Y41	7♎16	5°55	22°14	8♏11	F 2
S 3	4 50 17	11°32'39	21°47	2°44	8°9	27°51	2°12	7°32	8°7	25°21	22°40	7°4	5°52	22°21	8°7	S 3
S 4	4 54 13	12°33'31	4♋24	3°30	9°25	28°36	2°25	7°27	8°8	25°21	22°40	6°51	5°48	22°27	8°4	S 4
M 5	4 58 10	13°34'24	16°47	4°9	10°40	29°21	2°38	7°22	8°9	25°20	22°39	6°39	5°45	22°34	8°1	M 5
T 6	5 2 6	14°35'18	28°57	4°41	11°56	0♋7	2°51	7°17	8°10	25°20	22°38	6°29	5°42	22°41	7°57	T 6
W 7	5 6 3	15°36'12	10♏56	5°6	13°11	0°52	3°5	7°12	8°11	25°20	22°38	6°21	5°39	22°47	7°54	W 7
T 8	5 10 0	16°37'07	22°47	5°22	14°27	1°37	3°18	7°7	8°12	25°19	22°37	6°16	5°36	22°54	7°50	T 8
F 9	5 13 56	17°38'04	4♏36	5°R28	15°42	2°23	3°31	7°3	8°13	25°19	22°36	6°13	5°33	23°1	7°47	F 9
S 10	5 17 53	18°39'00	16°26	5°24	16°58	3°8	3°44	6°58	8°14	25°19	22°36	6°D12	5°29	23°7	7°43	S 10
S 11	5 21 49	19°39'58	28°24	5°9	18°13	3°54	3°57	6°53	8°16	25°18	22°35	6°12	5°26	23°14	7°39	S 11
M12	5 25 46	20°40'56	10♏34	4°43	19°29	4°39	4°10	6°48	8°17	25°18	22°35	6°R12	5°23	23°21	7°36	M12
T 13	5 29 42	21°41'54	23°3	4°5	20°44	5°25	4°23	6°44	8°18	25°17	22°34	6°11	5°20	23°27	7°32	T 13
W14	5 33 39	22°42'54	5♋54	3°16	22°0	6°10	4°37	6°39	8°20	25°17	22°34	6°8	5°17	23°34	7°28	W14
T 15	5 37 35	23°43'54	19°11	2°17	23°15	6°56	4°50	6°34	8°21	25°16	22°33	6°2	5°13	23°41	7°24	T 15
F 16	5 41 32	24°44'54	2♏54	1°8	24°31	7°42	5°3	6°30	8°23	25°15	22°33	5°53	5°10	23°47	7°21	F 16
S 17	5 45 29	25°45'55	17°2	29♌52	25°46	8°28	5°15	6°25	8°24	25°15	22°32	5°42	5°7	23°54	7°17	S 17
S 18	5 49 25	26°46'57	1♋30	28°32	27°2	9°13	5°28	6°21	8°26	25°14	22°32	5°30	5°4	24°1	7°13	S 18
M19	5 53 22	27°47'59	16°11	27°9	28°17	9°59	5°41	6°16	8°27	25°13	22°32	5°18	5°1	24°7	7°9	M19
T 20	5 57 18	28°49'02	0♎58	25°46	29°33	10°45	5°54	6°12	8°29	25°13	22°31	5°7	4°58	24°14	7°5	T 20
W21	6 1 15	29°50'06	15°41	24°27	0♋48	11°31	6°7	6°8	8°30	25°12	22°31	4°59	4°54	24°21	7°1	W21
T 22	6 5 11	0♋51'11	0♏15	23°14	2°4	12°17	6°20	6°3	8°32	25°11	22°31	4°54	4°51	24°27	6°57	T 22
F 23	6 9 8	1°52'16	14°35	22°9	3°19	13°3	6°32	5°59	8°34	25°10	22°30	4°52	4°48	24°34	6°54	F 23
S 24	6 13 4	2°53'22	28°38	21°13	4°35	13°49	6°45	5°55	8°36	25°9	22°30	4°51	4°45	24°41	6°50	S 24
S 25	6 17 1	3°54'29	12♎26	20°27	5°50	14°35	6°58	5°51	8°38	25°8	22°30	4°51	4°42	24°48	6°46	S 25
M26	6 20 58	4°55'36	25°58	19°52	7°6	15°22	7°10	5°47	8°40	25°8	22°29	4°50	4°38	24°54	6°42	M26
T 27	6 24 54	5°56'45	9♍16	19°27	8°21	16°8	7°23	5°43	8°42	25°7	22°29	4°47	4°35	25°1	6°38	T 27
W28	6 28 51	6°57'53	22°22	19°13	9°37	16°54	7°36	5°39	8°44	25°6	22°29	4°41	4°32	25°8	6°34	W28
T 29	6 32 47	7°59'03	5♌16	19°D 9	10°52	17°40	7°48	5°36	8°46	25°5	22°29	4°32	4°29	25°14	6°30	T 29
F 30	6 36 44	9°0'12	18°0	19°15	12°8	18°27	8°0	5°32	8°48	25°4	22°29	4°20	4°26	25°21	6°26	F 30
S 31	6 40 40	10♋1'22	0♋33	19♌29	13♋23	19♋13	8♌13	5♏28	8♏50	25°R 2	22°Y29	4♎7	4♎23	25♏28	6♏22	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
T 1	21s52	15s31	3n47	25s42	2s16	20s49	0n26	24s13	0s50	19s48	0n43	19n35	2s 1	9s15	0s46	13n22	0n20	7s20	17s22	2s57	2s22	10s45	16n23	6s48	
F 2	22 1	17 23	4 27	25 36	2 11	21 4	0 23	24 14	0 50	19 50	0 43	19 34	2 1	9 14	0 46	13 23	0 20	7 20	17 22	2 53	2 21	10 43	16 23	6 48	
S 3	22 9	18 19	4 52	25 28	2 5	21 19	0 21	24 15	0 51	19 53	0 43	19 33	2 1	9 14	0 46	13 23	0 20	7 20	17 22	2 48	2 20	10 42	16 23	6 49	
S 4	22 17	18 19	5 2	25 20	1 57	21 33	0 19	24 16	0 51	19 56	0 43	19 33	2 1	9 14	0 46	13 23	0 20	7 20	17 21	2 43	2 18	10 40	16 22	6 49	
M 5	22 25	17 27	4 58	25 10	1 49	21 46	0 16	24 17	0 52	19 58	0 43	19 32	2 1	9 13	0 46	13 23	0 20	7 19	17 21	2 38	2 17	10 39	16 22	6 49	
T 6	22 32	15 47	4 40	24 59	1 39	21 59	0 14	24 18	0 52	20 1	0 43	19 31	2 1	9 13	0 46	13 23	0 20	7 19	17 21	2 34	2 16	10 37	16 22	6 50	
W 7	22 39	13 28	4 10	24 47	1 28	22 11	0 11	24 18	0 52	20 3	0 43	19 31	2 1	9 12	0 46	13 23	0 20	7 19	17 20	2 31	2 15	10 36	16 22	6 50	
T 8	22 45	10 37	3 29	24 34	1 15	22 22	0 9	24 18	0 53	20 6	0 43	19 30	2 1	9 12	0 46	13 23	0 20	7 19	17 20	2 29	2 13	10 34	16 22	6 50	
F 9	22 51	7 20	2 40	24 20	1 1	22 33	0 7	24 17	0 53	20 8	0 43	19 29	2 1	9 12	0 46	13 23	0 20	7 19	17 20	2 28	2 12	10 33	16 22	6 51	
S 10	22 56	3 46	1 43	24 5	0 46	22 43	0 4	24 17	0 54	20 11	0 43	19 29	2 1	9 11	0 46	13 24	0 20	7 19	17 19	2 28	2 11	10 31	16 22	6 51	
S 11	23 1	0 0	0 41	23 49	0 29	22 52	0 2	24 16	0 54	20 13	0 43	19 28	2 0	9 11	0 46	13 24	0 20	7 19	17 19	2 28	2 9	10 30	16 22	6 51	
M12	23 6	3n50	0s23	23 32	0 11	23 1	0s 1	24 15	0 54	20 16	0 43	19 27	2 0	9 10	0 46	13 24	0 20	7 19	17 19	2 28	2 8	10 28	16 22	6 51	
T 13	23 10	7 35	1 28	23 14	0n 7	23 9	0 3	24 13	0 55	20 18	0 43	19 27	2 0	9 10	0 46	13 24	0 20	7 19	17 18	2 27	2 7	10 27	16 22	6 52	
W14	23 13	11 7	2 31	22 56	0 27	23 16	0 5	24 12	0 55	20 21	0 43	19 26	2 0	9 9	0 46	13 24	0 20	7 19	17 18	2 26	2 6	10 25	16 22	6 52	
T 15	23 17	14 11	3 27	22 37	0 47	23 23	0 8	24 10	0 55	20 23	0 43	19 25	2 0	9 8	0 46	13 24	0 20	7 19	17 18	2 24	2 4	10 23	16 21	6 52	
F 16	23 19	16 35	4 13	22 18	1 7	23 29	0 10	24 8	0 56	20 26	0 43	19 25	2 0	9 8	0 46	13 25	0 20	7 18	17 18	2 20	2 3	10 22	16 21	6 52	
S 17	23 21	18 4	4 45	21 59	1 27	23 34	0 13	24 5	0 56	20 28	0 43	19 24	2 0	9 7	0 46	13 25	0 20	7 18	17 17	2 16	2 2	10 20	16 21	6 53	
S 18	23 23	18 25	5 0	21 39	1 46	23 38	0 15	24 2	0 56	20 30	0 43	19 24	1 59	9 7	0 46	13 25	0 20	7 18	17 17	2 11	2 1	10 19	16 21	6 53	
M19	23 24	17 34	4 55	21 21	2 3	23 42	0 17	23 59	0 57	20 32	0 43	19 23	1 59	9 6	0 46	13 25	0 20	7 18	17 16	2 6	1 59	10 17	16 21	6 53	
T 20	23 25	15 31	4 31	21 3	2 18	23 45	0 20	23 56	0 57	20 35	0 43	19 23	1 59	9 5	0 46	13 26	0 20	7 18	17 16	2 2	1 58	10 16	16 21	6 53	
W21	23 25	12 29	3 49	20 47	2 32	23 47	0 22	23 53	0 57	20 37	0 43	19 22	1 59	9 5	0 46	13 26	0 20	7 18	17 16	1 59	1 57	10 14	16 22	6 53	
T 22	23 25	8 42	2 52	20 33	2 43	23 49	0 24	23 49	0 58	20 39	0 43	19 21	1 59	9 4	0 46	13 26	0 20	7 17	17 15	1 57	1 56	10 13	16 22	6 54	
F 23	23 25	4 27	1 45	20 20	2 51	23 49	0 26	23 45	0 58	20 41	0 43	19 21	1 59	9 3	0 45	13 27	0 20	7 17	17 15	1 56	1 54	10 11	16 22	6 54	
S 24	23 24	0 2	0 33	20 11	2 58	23 50	0 29	23 40	0 58	20 44	0 42	19 20	1 58	9 3	0 45	13 27	0 20	7 17	17 15	1 56	1 53	10 9	16 22	6 54	
S 25	23 22	4s18	0n40	20 4	3 1	23 49	0 31	23 36	0 58	20 46	0 42	19 20	1 58	9 2	0 45	13 27	0 20	7 17	17 14	1 56	1 52	10 8	16 22	6 54	
M26	23 20	8 20	1 49	20 0	3 3	23 47	0 33	23 31	0 59	20 48	0 42	19 19	1 58	9 1	0 45	13 28	0 20	7 16	17 14	1 55	1 51	10 6	16 22	6 54	
T 27	23 17	11 52	2 51	19 58	3 3	23 45	0 35	23 26	0 59	20 50	0 42	19 19	1 58	9 0	0 45	13 28	0 20	7 16	17 14	1 54	1 49	10 5	16 22	6 54	
W28	23 14	14 45	3 43	19 59	3 1	23 42	0 38	23 20	0 59	20 52	0 42	19 18	1 58	9 0	0 45	13 28	0 20	7 16	17 13	1 52	1 48	10 3	16 22	6 54	
T 29	23 11	16 52	4 22	20 1	2 58	23 39	0 40	23 14	0 59	20 54	0 42	19 18	1 57	8 59	0 45	13 29	0 20	7 16	17 13	1 48	1 47	10 2	16 22	6 54	
F 30	23 7	18 6	4 48	20 6	2 54	23 34	0 42	23 8	1 0	20 56	0 42	19 17	1 57	8 58	0 45	13 29	0 21	7 15	17 13	1 43	1 46	10 0	16 22	6 54	
S 31	23s 3	18s26	4n59	20s13	2n48	23s29	0s44	23s 2	1s 0	20s58	0n42	19n17	1s57	8s57	0s45	13n29	0n21	7s15	17s12	1s38	1s44	9s59	16m22	6s54	