



Astrodienst Ephemeris Tables for the year 2289

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 2289
geocentric

JANUARY 2289

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	6 43 53	10♌44'09	25♊33	27♊10	14♊R50	5♊20	1♌46	6♋8	21♊R31	11♌54	28♌55	24♊R54	25♌30	22♌26	13♊R33	T 1
W 2	6 47 49	11°45'16	8♋54	28°40	14♌14	6° 1	1°49	6°13	21♌29	11°55	28°56	24♌53	25°27	22°33	13♌30	W 2
T 3	6 51 46	12°46'23	21°59	0♌11	13°37	6°42	1°51	6°19	21°26	11°57	28°57	24°52	25°24	22°39	13°27	T 3
F 4	6 55 42	13°47'30	4♌49	1°43	13° 1	7°23	1°54	6°24	21°24	11°58	28°59	24°50	25°21	22°46	13°23	F 4
S 5	6 59 39	14°48'37	17°26	3°14	12°24	8° 5	1°56	6°29	21°21	11°59	29° 0	24°48	25°18	22°53	13°19	S 5
S 6	7 3 35	15°49'45	29°51	4°46	11°48	8°46	1°58	6°35	21°18	12° 0	29° 1	24°47	25°14	22°59	13°16	S 6
M 7	7 7 32	16°50'52	12♌5	6°18	11°12	9°27	2° 0	6°40	21°16	12° 2	29° 3	24°46	25°11	23° 6	13°12	M 7
T 8	7 11 28	17°51'59	24°10	7°51	10°38	10° 8	2° 1	6°46	21°13	12° 3	29° 4	24°D46	25° 8	23°13	13° 8	T 8
W 9	7 15 25	18°53'06	6♌8	9°24	10° 4	10°49	2° 3	6°51	21°11	12° 4	29° 5	24°46	25° 5	23°19	13° 5	W 9
T 10	7 19 22	19°54'13	17°59	10°57	9°32	11°31	2° 4	6°57	21° 8	12° 5	29° 7	24°47	25° 2	23°26	13° 1	T 10
F 11	7 23 18	20°55'20	29°48	12°31	9° 1	12°12	2° 5	7° 3	21° 5	12° 6	29° 8	24°47	24°59	23°33	12°57	F 11
S 12	7 27 15	21°56'27	11♏37	14° 5	8°32	12°53	2° 6	7° 9	21° 3	12° 7	29°10	24°48	24°55	23°39	12°53	S 12
S 13	7 31 11	22°57'34	23°28	15°40	8° 5	13°35	2° 7	7°15	21° 0	12° 8	29°11	24°48	24°52	23°46	12°49	S 13
M14	7 35 8	23°58'42	5♌28	17°14	7°40	14°16	2° 8	7°21	20°58	12° 9	29°12	24°48	24°49	23°53	12°45	M14
T 15	7 39 4	24°59'49	17°38	18°50	7°18	14°57	2° 8	7°27	20°55	12°10	29°14	24°R48	24°46	23°59	12°40	T 15
W16	7 43 1	26° 0'56	0♌5	20°26	6°57	15°39	2°R 8	7°33	20°52	12°11	29°15	24°D48	24°43	24° 6	12°36	W16
T 17	7 46 57	27° 2'04	12°53	22° 2	6°39	16°20	2° 8	7°39	20°50	12°12	29°17	24°48	24°39	24°13	12°32	T 17
F 18	7 50 54	28° 3'11	26° 4	23°38	6°23	17° 2	2° 8	7°45	20°47	12°13	29°18	24°48	24°36	24°19	12°28	F 18
S 19	7 54 51	29° 4'18	9♊42	25°16	6°10	17°44	2° 7	7°51	20°45	12°14	29°20	24°49	24°33	24°26	12°23	S 19
S 20	7 58 47	0♏5'26	23°47	26°53	5°59	18°25	2° 7	7°57	20°42	12°14	29°22	24°49	24°30	24°33	12°19	S 20
M21	8 2 44	1° 6'32	8♌17	28°32	5°51	19° 7	2° 6	8° 4	20°40	12°15	29°23	24°50	24°27	24°39	12°15	M21
T 22	8 6 40	2° 7'39	23° 8	0♏10	5°45	19°48	2° 5	8°10	20°37	12°16	29°25	24°R50	24°24	24°46	12°10	T 22
W23	8 10 37	3° 8'45	8♌13	1°50	5°42	20°30	2° 4	8°16	20°35	12°17	29°26	24°50	24°20	24°53	12° 6	W23
T 24	8 14 33	4° 9'50	23°23	3°29	5°D41	21°12	2° 2	8°23	20°32	12°17	29°28	24°49	24°17	24°59	12° 1	T 24
F 25	8 18 30	5°10'55	8♋27	5°10	5°42	21°53	2° 1	8°29	20°30	12°18	29°29	24°48	24°14	25° 6	11°57	F 25
S 26	8 22 26	6°11'59	23°18	6°51	5°46	22°35	1°59	8°36	20°27	12°19	29°31	24°47	24°11	25°13	11°52	S 26
S 27	8 26 23	7°13'02	7♊49	8°32	5°53	23°17	1°57	8°42	20°25	12°19	29°33	24°45	24° 8	25°19	11°48	S 27
M28	8 30 20	8°14'04	21°56	10°14	6° 1	23°59	1°55	8°49	20°22	12°20	29°34	24°44	24° 5	25°26	11°43	M28
T 29	8 34 16	9°15'05	5♌38	11°57	6°12	24°40	1°52	8°56	20°20	12°20	29°36	24°D44	24° 1	25°33	11°39	T 29
W30	8 38 13	10°16'04	18°56	13°40	6°25	25°22	1°50	9° 2	20°17	12°21	29°38	24°44	23°58	25°39	11°34	W30
T 31	8 42 9	11°17'03	1♌52	15°24	6♌40	26°21	1°47	9♋9	20°15	12°21	29°39	24°45	23°55	25°46	11°30	T 31

Day	☉	☽		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	lat	decl	lat	decl	lat
T 1	22s58	14n46	5n17	23s35	0s12	19s27	3n 9	20s59	0n10	0n27	1n15	10s47	1s39	22n 9	0n29	13s45	1n43	21s14	10s 3	21s 7	21s 0	11n48	9n23	7s40			
W 2	22 53	19 17	5 7	23 43	0 19	19 16	3 24	21 7	0 10	0 26	1 15	10 45	1 39	22 10	0 29	13 46	1 43	21 13	10 3	21 7	21 1	11 45	9 23	7 40			
T 3	22 47	22 46	4 42	23 50	0 26	19 5	3 38	21 15	0 9	0 25	1 15	10 43	1 39	22 10	0 29	13 46	1 43	21 13	10 3	21 7	21 2	11 42	9 24	7 40			
F 4	22 41	25 3	4 3	23 57	0 33	18 55	3 52	21 22	0 8	0 24	1 16	10 41	1 39	22 11	0 29	13 46	1 43	21 12	10 3	21 8	21 2	11 40	9 24	7 41			
S 5	22 35	26 0	3 13	24 1	0 40	18 45	4 6	21 30	0 8	0 24	1 16	10 39	1 39	22 11	0 29	13 47	1 43	21 11	10 2	21 8	21 3	11 37	9 25	7 41			
S 6	22 28	25 38	2 14	24 5	0 46	18 35	4 19	21 37	0 7	0 23	1 16	10 37	1 39	22 11	0 29	13 47	1 43	21 11	10 2	21 8	21 3	11 34	9 26	7 42			
M 7	22 21	24 1	1 10	24 7	0 52	18 25	4 32	21 44	0 6	0 23	1 17	10 35	1 39	22 12	0 29	13 47	1 43	21 10	10 2	21 8	21 4	11 31	9 26	7 42			
T 8	22 13	21 18	0 3	24 8	0 58	18 16	4 44	21 50	0 6	0 22	1 17	10 33	1 39	22 12	0 29	13 48	1 43	21 10	10 2	21 8	21 4	11 28	9 27	7 42			
W 9	22 4	17 42	1s 3	24 8	1 4	18 7	4 55	21 57	0 5	0 22	1 17	10 31	1 39	22 13	0 29	13 48	1 43	21 9	10 2	21 8	21 5	11 25	9 28	7 43			
T 10	21 56	13 25	2 6	24 7	1 10	17 59	5 6	22 3	0 4	0 22	1 17	10 28	1 39	22 13	0 29	13 48	1 43	21 8	10 2	21 8	21 6	11 22	9 29	7 43			
F 11	21 47	8 40	3 3	24 4	1 15	17 51	5 16	22 10	0 4	0 21	1 18	10 26	1 39	22 13	0 29	13 48	1 43	21 8	10 2	21 8	21 6	11 19	9 29	7 43			
S 12	21 37	3 37	3 52	24 0	1 20	17 44	5 25	22 16	0 3	0 21	1 18	10 24	1 39	22 14	0 29	13 49	1 43	21 7	10 2	21 8	21 7	11 16	9 30	7 43			
S 13	21 27	1s34	4 32	23 54	1 25	17 37	5 33	22 21	0 2	0 21	1 18	10 22	1 39	22 14	0 29	13 49	1 43	21 7	10 2	21 8	21 7	11 14	9 31	7 44			
M14	21 17	6 45	5 0	23 47	1 30	17 30	5 41	22 27	0 2	0 21	1 18	10 20	1 39	22 15	0 29	13 49	1 43	21 6	10 1	21 8	21 8	11 11	9 32	7 44			
T 15	21 6	11 46	5 15	23 39	1 35	17 25	5 48	22 32	0 1	0 21	1 19	10 17	1 39	22 15	0 29	13 49	1 43	21 5	10 1	21 8	21 8	11 8	9 33	7 44			
W16	20 55	16 25	5 17	23 29	1 39	17 19	5 54	22 38	0 0	0 22	1 19	10 15	1 38	22 15	0 29	13 50	1 43	21 5	10 1	21 8	21 9	11 5	9 34	7 44			
T 17	20 43	20 29	5 2	23 18	1 43	17 15	6 0	22 43	0s 0	0 22	1 19	10 13	1 38	22 16	0 29	13 50	1 43	21 4	10 1	21 8	21 10	11 2	9 35	7 45			
F 18	20 31	23 39	4 32	23 5	1 47	17 11	6 5	22 47	0 1	0 22	1 20	10 10	1 38	22 16	0 29	13 50	1 43	21 3	10 1	21 8	21 10	10 59	9 36	7 45			
S 19	20 19	25 35	3 46	22 51	1 50	17 7	6 9	22 52	0 2	0 23	1 20	10 8	1 38	22 17	0 29	13 50	1 44	21 3	10 1	21 8	21 11	10 56	9 37	7 45			
S 20	20 6	25 59	2 44	22 36	1 53	17 4	6 13	22 56	0 2	0 23	1 20	10 6	1 38	22 17	0 29	13 50	1 44	21 2	10 1	21 8	21 11	10 53	9 38	7 45			
M21	19 53	24 39	1 31	22 19	1 56	17 1	6 16	23 1	0 3	0 24	1 20	10 3	1 38	22 17	0 29	13 51	1 44	21 2	10 1	21 8	21 12	10 50	9 39	7 45			
T 22	19 39	21 35	0 9	22 1	1 58	16 59	6 18	23 5	0 4	0 24	1 21	10 1	1 38	22 18	0 29	13 51	1 44	21 1	10 1	21 8	21 12	10 47	9 40	7 45			
W23	19 25	17 0	1n14	21 41	2 0	16 58	6 20	23 8	0 5	0 25	1 21	9 58	1 38	22 18	0 29	13 51	1 44	21 0	10 1	21 8	21 13	10 44	9 41	7 45			
T 24	19 11	11 19	2 32	21 20	2 2	16 56	6 21	23 12	0 5	0 26	1 21	9 56	1 38	22 19	0 29	13 51	1 44	21 0	10 1	21 8	21 14	10 41	9 42	7 45			
F 25	18 57	5 0	3 39	20 57	2 4	16 56	6 22	23 15	0 6	0 27	1 21	9 53	1 38	22 19	0 29	13 51	1 44	20 59	10 1	21 8	21 14	10 39	9 43	7 46			
S 26	18 42	1n29	4 31	20 33	2 5	16 55	6 22	23 19	0 7	0 28	1 22	9 51	1 38	22 19	0 29	13 51	1 44	20 58	10 1	21 8	21 15	10 36	9 44	7 46			
S 27	18 26	7 44	5 3	20 7	2 5	16 55	6 21	23 21	0 8	0 29	1 22	9 48	1 38	22 20	0 29	13 52	1 44	20 58	10 1	21 9	21 15	10 33	9 45	7 46			
M28	18 11	13 25	5 17	19 40	2 6	16 56	6 21	23 24	0 8	0 30	1 22	9 46	1 38	22 20	0 29	13 52	1 44	20 57	10 0	21 9	21 16	10 30	9 47	7 46			
T 29	17 55	18 16	5 11	19 11	2 5	16 56	6 20	23 27	0 9	0 31	1 23	9 43	1 38	22 20	0 29	13 52	1 44	20 56	10 0	21 9	21 16	10 27	9 48	7 46			
W30	17 39	22 3	4 49	18 41	2 5	16 57	6 18	23 29	0 10	0 32	1 23	9 41	1 38	22 21	0 29	13 52	1 44	20 57	10 0	21 9	21 17	10 24	9 49	7 46			
T 31	17s22	24n38	4n13	18s10	2s 4	16s58	6n16	23s31	0s11	0n34	1n23	9s38	1s38	22n21	0n29	13s52	1n44	20s55	10s 0	21s 9	21s17	10n21	9n50	7s46			

ASTRODIENST EPHEMERIS for the year 2289
geocentric

FEBRUARY 2289

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	8 46 6	12 ¹⁸ 01	14 ¹¹ 29	17 ¹⁸ 8	6 ³⁵ 7	26 ¹⁴ 46	1 ⁰ R44	9 ¹⁶ 16	20 ⁰ R13	12 ¹¹ 21	29 ¹¹ 41	24 ¹³ 46	23 ¹³ 52	25 ¹⁵ 53	11 ⁰ R25	F 1
S 2	8 50 2	13 ⁰ 18'58	26 ⁰ 51	18 ⁰ 53	7 ⁰ 16	27 ⁰ 28	1 ⁰ 41	9 ⁰ 23	20 ⁰ 10	12 ⁰ 22	29 ⁰ 43	24 ⁰ 48	23 ⁰ 49	25 ⁰ 59	11 ⁰ Q21	S 2
S 3	8 53 59	14 ⁰ 19'53	9 ⁰ 1	20 ⁰ 38	7 ⁰ 37	28 ⁰ 10	1 ⁰ 38	9 ⁰ 30	20 ⁰ 8	12 ⁰ 22	29 ⁰ 44	24 ⁰ 49	23 ⁰ 45	26 ⁰ 6	11 ⁰ 16	S 3
M 4	8 57 55	15 ⁰ 20'48	21 ⁰ 2	22 ⁰ 24	8 ⁰ 0	28 ⁰ 52	1 ⁰ 34	9 ⁰ 37	20 ⁰ 6	12 ⁰ 22	29 ⁰ 46	24 ⁰ R50	23 ⁰ 42	26 ⁰ 13	11 ⁰ 12	M 4
T 5	9 1 52	16 ⁰ 21'41	2 ⁰ Q57	24 ⁰ 9	8 ⁰ 24	29 ⁰ 34	1 ⁰ 31	9 ⁰ 43	20 ⁰ 3	12 ⁰ 23	29 ⁰ 48	24 ⁰ 49	23 ⁰ 39	26 ⁰ 19	11 ⁰ 7	T 5
W 6	9 5 49	17 ⁰ 22'33	14 ⁰ 48	25 ⁰ 56	8 ⁰ 51	0 ⁰ 16	1 ⁰ 27	9 ⁰ 50	20 ⁰ 1	12 ⁰ 23	29 ⁰ 49	24 ⁰ 48	23 ⁰ 36	26 ⁰ 26	11 ⁰ 3	W 6
T 7	9 9 45	18 ⁰ 23'24	26 ⁰ 37	27 ⁰ 42	9 ⁰ 19	0 ⁰ 58	1 ⁰ 23	9 ⁰ 57	19 ⁰ 59	12 ⁰ 23	29 ⁰ 51	24 ⁰ 45	23 ⁰ 33	26 ⁰ 33	10 ⁰ 58	T 7
F 8	9 13 42	19 ⁰ 24'15	8 ⁰ 17	29 ⁰ 28	9 ⁰ 48	1 ⁰ 40	1 ⁰ 19	10 ⁰ 4	19 ⁰ 57	12 ⁰ 23	29 ⁰ 53	24 ⁰ 42	23 ⁰ 30	26 ⁰ 39	10 ⁰ 54	F 8
S 9	9 17 38	20 ⁰ 25'04	20 ⁰ 18	1 ⁰ 14	10 ⁰ 20	2 ⁰ 22	1 ⁰ 15	10 ⁰ 11	19 ⁰ 55	12 ⁰ 23	29 ⁰ 54	24 ⁰ 37	23 ⁰ 26	26 ⁰ 46	10 ⁰ 49	S 9
S 10	9 21 35	21 ⁰ 25'52	2 ⁰ 14	3 ⁰ 0	10 ⁰ 52	3 ⁰ 4	1 ⁰ 10	10 ⁰ 18	19 ⁰ 52	12 ⁰ 23	29 ⁰ 56	24 ⁰ 32	23 ⁰ 23	26 ⁰ 53	10 ⁰ 45	S 10
M 11	9 25 31	22 ⁰ 26'39	14 ⁰ 17	4 ⁰ 45	11 ⁰ 27	3 ⁰ 46	1 ⁰ 5	10 ⁰ 25	19 ⁰ 50	12 ⁰ 23	29 ⁰ 58	24 ⁰ 28	23 ⁰ 20	26 ⁰ 59	10 ⁰ 40	M 11
T 12	9 29 28	23 ⁰ 27'25	26 ⁰ 30	6 ⁰ 29	12 ⁰ 2	4 ⁰ 29	1 ⁰ 1	10 ⁰ 33	19 ⁰ 48	12 ⁰ R23	29 ⁰ 59	24 ⁰ 24	23 ⁰ 17	27 ⁰ 6	10 ⁰ 36	T 12
W 13	9 33 24	24 ⁰ 28'10	8 ⁰ 15	8 ⁰ 12	12 ⁰ 39	5 ⁰ 11	0 ⁰ 56	10 ⁰ 40	19 ⁰ 46	12 ⁰ 23	0 ⁰ 1	24 ⁰ 21	23 ⁰ 14	27 ⁰ 13	10 ⁰ 32	W 13
T 14	9 37 21	25 ⁰ 28'54	21 ⁰ 38	9 ⁰ 54	13 ⁰ 17	5 ⁰ 53	0 ⁰ 51	10 ⁰ 47	19 ⁰ 44	12 ⁰ 23	0 ⁰ 3	24 ⁰ D20	23 ⁰ 11	27 ⁰ 19	10 ⁰ 27	T 14
F 15	9 41 18	26 ⁰ 29'37	4 ⁰ 41	11 ⁰ 34	13 ⁰ 57	6 ⁰ 35	0 ⁰ 45	10 ⁰ 54	19 ⁰ 42	12 ⁰ 23	0 ⁰ 5	24 ⁰ 20	23 ⁰ 7	27 ⁰ 26	10 ⁰ 23	F 15
S 16	9 45 14	27 ⁰ 30'20	18 ⁰ 7	13 ⁰ 11	14 ⁰ 37	7 ⁰ 18	0 ⁰ 40	11 ⁰ 1	19 ⁰ 40	12 ⁰ 23	0 ⁰ 7	24 ⁰ 22	23 ⁰ 4	27 ⁰ 33	10 ⁰ 19	S 16
S 17	9 49 11	28 ⁰ 31'01	2 ⁰ 3	14 ⁰ 46	15 ⁰ 19	8 ⁰ 0	0 ⁰ 34	11 ⁰ 8	19 ⁰ 39	12 ⁰ 23	0 ⁰ 8	24 ⁰ 23	23 ⁰ 1	27 ⁰ 39	10 ⁰ 15	S 17
M 18	9 53 7	29 ⁰ 31'41	16 ⁰ 20	16 ⁰ 17	16 ⁰ 2	8 ⁰ 42	0 ⁰ 29	11 ⁰ 16	19 ⁰ 37	12 ⁰ 23	0 ⁰ 10	24 ⁰ 24	22 ⁰ 58	27 ⁰ 46	10 ⁰ 10	M 18
T 19	9 57 4	0 ⁰ 32'20	1 ⁰ 3	17 ⁰ 44	16 ⁰ 46	9 ⁰ 25	0 ⁰ 23	11 ⁰ 23	19 ⁰ 35	12 ⁰ 23	0 ⁰ 12	24 ⁰ R24	22 ⁰ 55	27 ⁰ 53	10 ⁰ 6	T 19
W 20	10 1 0	1 ⁰ 32'58	16 ⁰ 7	19 ⁰ 7	17 ⁰ 31	10 ⁰ 7	0 ⁰ 17	11 ⁰ 30	19 ⁰ 33	12 ⁰ 22	0 ⁰ 14	24 ⁰ 23	22 ⁰ 51	27 ⁰ 59	10 ⁰ 2	W 20
T 21	10 4 57	2 ⁰ 33'34	1 ⁰ 22	20 ⁰ 24	18 ⁰ 16	10 ⁰ 50	0 ⁰ 11	11 ⁰ 37	19 ⁰ 31	12 ⁰ 22	0 ⁰ 15	24 ⁰ 19	22 ⁰ 48	28 ⁰ 6	9 ⁰ 58	T 21
F 22	10 8 53	3 ⁰ 34'09	16 ⁰ 38	21 ⁰ 35	19 ⁰ 3	11 ⁰ 32	0 ⁰ 4	11 ⁰ 45	19 ⁰ 30	12 ⁰ 22	0 ⁰ 17	24 ⁰ 14	22 ⁰ 45	28 ⁰ 13	9 ⁰ 54	F 22
S 23	10 12 50	4 ⁰ 34'42	1 ⁰ 45	22 ⁰ 40	19 ⁰ 51	12 ⁰ 15	29 ⁰ 17	11 ⁰ 52	19 ⁰ 28	12 ⁰ 21	0 ⁰ 19	24 ⁰ 8	22 ⁰ 42	28 ⁰ 19	9 ⁰ 50	S 23
S 24	10 16 47	5 ⁰ 35'14	16 ⁰ 33	23 ⁰ 37	20 ⁰ 39	12 ⁰ 57	29 ⁰ 52	11 ⁰ 59	19 ⁰ 27	12 ⁰ 21	0 ⁰ 20	24 ⁰ 1	22 ⁰ 39	28 ⁰ 26	9 ⁰ 46	S 24
M 25	10 20 43	6 ⁰ 35'43	0 ⁰ 8	24 ⁰ 26	21 ⁰ 28	13 ⁰ 40	29 ⁰ 45	12 ⁰ 6	19 ⁰ 25	12 ⁰ 21	0 ⁰ 22	23 ⁰ 56	22 ⁰ 36	28 ⁰ 33	9 ⁰ 42	M 25
T 26	10 24 40	7 ⁰ 36'11	14 ⁰ 49	25 ⁰ 7	22 ⁰ 18	14 ⁰ 22	29 ⁰ 38	12 ⁰ 14	19 ⁰ 24	12 ⁰ 20	0 ⁰ 24	23 ⁰ 52	22 ⁰ 32	28 ⁰ 39	9 ⁰ 39	T 26
W 27	10 28 36	8 ⁰ 36'37	28 ⁰ 13	25 ⁰ 38	23 ⁰ 9	15 ⁰ 5	29 ⁰ 31	12 ⁰ 21	19 ⁰ 22	12 ⁰ 20	0 ⁰ 26	23 ⁰ 49	22 ⁰ 29	28 ⁰ 46	9 ⁰ 35	W 27
T 28	10 32 33	9 ⁰ 37'02	11 ⁰ 11	26 ⁰ 11	24 ⁰ 3	15 ⁰ 47	29 ⁰ 25	12 ⁰ 18	19 ⁰ 21	12 ⁰ 19	0 ⁰ 27	23 ⁰ D49	22 ⁰ 26	28 ⁰ 53	9 ⁰ 31	T 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
F 1	17s 5	25n54	3n25	17s37	2s 2	17s 0	6n14	23s33	0s11	0n35	1n23	9s36	1s38	22n21	0n29	13s52	1n44	20s55	10s 0	21s 8	21s18	10n18	9n51	7s46	
S 2	16 48	25 51	2 29	17 3	2 0	17 1	6 11	23 35	0 12	0 37	1 24	9 33	1 38	22 22	0 29	13 52	1 44	20 54	10 0	21 8	21 18	10 15	9 53	7 45	
S 3	16 30	24 32	1 26	16 27	1 57	17 3	6 8	23 36	0 13	0 38	1 24	9 31	1 38	22 22	0 29	13 52	1 44	20 53	10 0	21 8	21 19	10 12	9 54	7 45	
M 4	16 13	22 6	0 21	15 50	1 54	17 5	6 5	23 37	0 14	0 40	1 24	9 28	1 38	22 23	0 29	13 52	1 44	20 53	10 0	21 8	21 20	10 9	9 55	7 45	
T 5	15 55	18 45	0s45	15 11	1 51	17 7	6 2	23 38	0 14	0 41	1 24	9 25	1 38	22 23	0 29	13 52	1 45	20 52	10 0	21 8	21 20	10 6	9 57	7 45	
W 6	15 36	14 39	1 48	14 31	1 46	17 9	5 58	23 39	0 15	0 43	1 25	9 23	1 38	22 23	0 29	13 52	1 45	20 52	10 0	21 8	21 21	10 3	9 58	7 45	
T 7	15 18	10 1	2 46	13 50	1 41	17 11	5 54	23 40	0 16	0 45	1 25	9 20	1 38	22 23	0 29	13 52	1 45	20 51	10 0	21 9	21 21	10 0	9 59	7 45	
F 8	14 59	5 2	3 37	13 8	1 36	17 13	5 50	23 40	0 17	0 47	1 25	9 17	1 38	22 24	0 29	13 52	1 45	20 50	10 0	21 9	21 22	9 57	10 1	7 45	
S 9	14 40	0s 8	4 19	12 25	1 30	17 15	5 46	23 40	0 18	0 49	1 25	9 15	1 38	22 24	0 29	13 52	1 45	20 50	10 0	21 10	21 22	9 55	10 2	7 45	
S 10	14 20	5 19	4 50	11 40	1 23	17 17	5 41	23 40	0 18	0 51	1 26	9 12	1 38	22 24	0 29	13 52	1 45	20 49	10 0	21 11	21 23	9 52	10 3	7 44	
M 11	14 1	10 22	5 8	10 55	1 15	17 19	5 36	23 40	0 19	0 53	1 26	9 9	1 38	22 25	0 29	13 52	1 45	20 48	10 0	21 12	21 23	9 49	10 5	7 44	
T 12	13 41	15 4	5 13	10 9	1 7	17 21	5 32	23 40	0 20	0 55	1 26	9 7	1 38	22 25	0 29	13 52	1 45	20 48	10 0	21 12	21 24	9 46	10 6	7 44	
W 13	13 21	19 14	5 3	9 22	0 58	17 23	5 27	23 39	0 21	0 57	1 26	9 4	1 38	22 25	0 29	13 52	1 45	20 47	10 0	21 13	21 24	9 43	10 7	7 44	
T 14	13 0	22 37	4 39	8 35	0 48	17 25	5 21	23 38	0 22	0 59	1 26	9 1	1 38	22 26	0 29	13 52	1 45	20 47	10 0	21 13	21 25	9 40	10 9	7 43	
F 15	12 40	24 57	3 59	7 48	0 38	17 26	5 16	23 37	0 22	1 2	1 27	8 59	1 38	22 26	0 29	13 52	1 45	20 46	10 0	21 13	21 26	9 37	10 10	7 43	
S 16	12 19	25 57	3 5	7 0	0 26	17 27	5 11	23 35	0 23	1 4	1 27	8 56	1 38	22 26	0 29	13 52	1 45	20 45	10 0	21 13	21 26	9 34	10 12	7 43	
S 17	11 58	25 23	1 59	6 13	0 14	17 28	5 5	23 34	0 24	1 6	1 27	8 53	1 38	22 26	0 29	13 51	1 45	20 45	10 1	21 12	21 27	9 31	10 13	7 42	
M 18	11 37	23 8	0 44	5 26	0 2	17 29	5 0	23 32	0 25	1 9	1 27	8 50	1 38	22 27	0 29	13 51	1 45	20 44	10 1	21 12	21 27	9 28	10 14	7 42	
T 19	11 16	19 18	0n36	4 40	0n11	17 29	4 54	23 30	0 26	1 11	1 27	8 48	1 38	22 27	0 29	13 51	1 45	20 44	10 1	21 12	21 28	9 25	10 16	7 42	
W 20	10 54	14 9	1 56	3 55	0 25	17 30	4 48	23 28	0 27	1 14	1 28	8 45	1 38	22 27	0 29	13 51	1 45	20 43	10 1	21 13	21 28	9 22	10 17	7 41	
T 21	10 33	8 3	3 8	3 12	0 39	17 30	4 42	23 25	0 27	1 16	1 28	8 42	1 38	22 27	0 29	13 51	1 46	20 43	10 1	21 13	21 29	9 19	10 19	7 41	
F 22	10 11	1 29	4 6	2 30	0 54	17 29	4 36	23 22	0 28	1 19	1 28	8 39	1 38	22 28	0 29	13 51	1 46	20 42	10 1	21 14	21 29	9 16	10 20	7 41	
S 23	9 49	5n 5	4 47	1 51	1 9	17 29	4 30	23 19	0 29	1 22	1 28	8 37	1 38	22 28	0 29	13 51	1 46	20 41	10 1	21 15	21 30	9 13	10 21	7 40	
S 24	9 27	11 13	5 7	1 14	1 24	17 28	4 24	23 16	0 30	1 24	1 28	8 34	1 38	22 28	0 29	13 51	1 46	20 41	10 1	21 16	21 30	9 10	10 23	7 40	
M 25	9 5	16 35	5 8	0 41	1 40	17 26	4 18	23 13	0 31	1 27	1 29	8 31	1 38	22 28	0 29	13 50	1 46	20 40	10 1	21 17	21 31	9 7	10 24	7 39	
T 26	8 42	20 52	4 50	0 11	1 55	17 25	4 12	23 9	0 32	1 30	1 29	8 28	1 38	22 28	0 29	13 50	1 46	20 40	10 1	21 18	21 31	9 4	10 26	7 39	
W 27	8 20	23 53	4 16	0n15	2 10	17 23	4 6	23 6	0 33	1 33	1 29	8 26	1 38	22 29	0 29	13 50	1 46	20 39	10 1	21 18	21 32	9 1	10 27	7 38	
T 28	7s57	25n33	3n30	0n37	2n24	17s20	4n 0	23s 2	0s34	1n36	1n29	8s23	1s38	22n29	0n29	13s50	1n46	20s39	10s 1	21s18	21s32	8n58	10n28	7s38	

ASTRODIENST EPHEMERIS for the year 2289
geocentric

MARCH 2289

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	10 36 29	10♈37'24	23♏45	26♊12	24♈52	16♈30	29°R18	12♈36	19°R19	12°R19	0♈29	23♈49	22♈23	28♏59	9°R28	F 1
S 2	10 40 26	11°37'45	6♏1	26°R14	25°45	17°13	29°R11	12°43	19°R18	12°R18	0°31	23°51	22°20	29°6	9♏24	S 2
S 3	10 44 22	12°38'03	18°4	26°6	26°38	17°55	29°3	12°50	19°17	12°17	0°32	23°R52	22°16	29°13	9°21	S 3
M 4	10 48 19	13°38'20	29°58	25°49	27°32	18°38	28°56	12°58	19°16	12°17	0°34	23°52	22°13	29°19	9°17	M 4
T 5	10 52 16	14°38'34	11♏47	25°23	28°27	19°21	28°49	13°5	19°14	12°16	0°36	23°50	22°10	29°26	9°14	T 5
W 6	10 56 12	15°38'47	23°35	24°48	29°22	20°3	28°41	13°12	19°13	12°15	0°38	23°46	22°7	29°33	9°11	W 6
T 7	11 0 9	16°38'58	5♏24	24°6	0♏18	20°46	28°34	13°20	19°12	12°15	0°39	23°39	22°4	29°39	9°8	T 7
F 8	11 4 5	17°39'07	17°17	23°17	1°14	21°29	28°26	13°27	19°11	12°14	0°41	23°30	22°1	29°46	9°5	F 8
S 9	11 8 2	18°39'14	29°15	22°23	2°11	22°12	28°19	13°34	19°10	12°13	0°43	23°20	21°57	29°53	9°2	S 9
S 10	11 11 58	19°39'19	11♏20	21°26	3°8	22°54	28°11	13°42	19°9	12°12	0°44	23°8	21°54	29°59	8°59	S 10
M 11	11 15 55	20°39'23	23°32	20°26	4°6	23°37	28°4	13°49	19°8	12°12	0°46	22°58	21°51	0♏6	8°56	M 11
T 12	11 19 51	21°39'25	5♏53	19°25	5°4	24°20	27°56	13°56	19°8	12°11	0°48	22°48	21°48	0°13	8°53	T 12
W 13	11 23 48	22°39'25	18°26	18°24	6°3	25°3	27°48	14°3	19°7	12°10	0°49	22°41	21°45	0°19	8°50	W 13
T 14	11 27 45	23°39'24	1♏12	17°26	7°2	25°46	27°40	14°11	19°6	12°9	0°51	22°36	21°42	0°26	8°48	T 14
F 15	11 31 41	24°39'21	14°13	16°30	8°1	26°29	27°33	14°18	19°5	12°8	0°52	22°33	21°38	0°33	8°45	F 15
S 16	11 35 38	25°39'17	27°33	15°38	9°1	27°12	27°25	14°25	19°5	12°7	0°54	22°D33	21°35	0°39	8°43	S 16
S 17	11 39 34	26°39'11	11♏14	14°51	10°2	27°55	27°17	14°32	19°4	12°6	0°56	22°33	21°32	0°46	8°41	S 17
M 18	11 43 31	27°39'04	25°18	14°9	11°2	28°38	27°9	14°40	19°4	12°5	0°57	22°R34	21°29	0°53	8°38	M 18
T 19	11 47 27	28°38'54	9♏45	13°33	12°3	29°21	27°1	14°47	19°3	12°4	0°59	22°32	21°26	0°59	8°36	T 19
W 20	11 51 24	29°38'43	24°32	13°4	13°5	0♏4	26°53	14°54	19°3	12°3	1°0	22°29	21°22	1°6	8°34	W 20
T 21	11 55 20	0♏38'31	9♏34	12°40	14°6	0°47	26°46	15°1	19°2	12°2	1°2	22°23	21°19	1°13	8°32	T 21
F 22	11 59 17	1°38'16	24°43	12°24	15°8	1°30	26°38	15°8	19°2	12°0	1°3	22°14	21°16	1°19	8°30	F 22
S 23	12 3 13	2°37'59	9♏47	12°13	16°10	2°13	26°30	15°15	19°2	11°59	1°5	22°4	21°13	1°26	8°29	S 23
S 24	12 7 10	3°37'41	24°38	12°D 9	17°13	2°56	26°22	15°22	19°2	11°58	1°7	21°53	21°10	1°33	8°27	S 24
M 25	12 11 7	4°37'20	9♏7	12°10	18°16	3°39	26°15	15°30	19°2	11°57	1°8	21°43	21°7	1°39	8°25	M 25
T 26	12 15 3	5°36'57	23°8	12°18	19°19	4°22	26°7	15°37	19°2	11°56	1°9	21°34	21°3	1°46	8°24	T 26
W 27	12 19 0	6°36'32	6♏40	12°30	20°22	5°6	25°59	15°44	19°D 2	11°54	1°11	21°29	21°0	1°53	8°22	W 27
T 28	12 22 56	7°36'05	19°43	12°49	21°26	5°49	25°52	15°51	19°2	11°53	1°12	21°25	20°57	2°0	8°21	T 28
F 29	12 26 53	8°35'35	2♏21	13°12	22°30	6°32	25°44	15°58	19°2	11°52	1°14	21°24	20°54	2°6	8°20	F 29
S 30	12 30 49	9°35'04	14°39	13°39	23°34	7°15	25°37	16°5	19°2	11°51	1°15	21°24	20°51	2°13	8°19	S 30
S 31	12 34 46	10°Y34'29	26♏42	14♏12	24♏38	7♏58	25°R30	16♏11	19°R2	11°R49	1°R17	21°R24	20°R48	2°R20	8°R18	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
F 1	7s34	25n51	2n36	0n54	2n38	17s17	3n54	22s57	0s34	1n39	1n29	8s20	1s38	22n29	0n29	13s50	1n46	20s38	10s1	21s18	21s33	8n55	10n30	7s38			
S 2	7 11	24 51	1 35	1 7	2 51	17 14	3 47	22 53	0 35	1 42	1 29	8 17	1 38	22 29	0 29	13 49	1 46	20 38	10 1	21 18	21 33	8 53	10 31	7 37			
S 3	6 49	22 42	0 31	1 15	3 3	17 11	3 41	22 48	0 36	1 45	1 29	8 15	1 38	22 29	0 28	13 49	1 46	20 37	10 2	21 18	21 34	8 50	10 32	7 37			
M 4	6 25	19 35	0s33	1 18	3 13	17 7	3 35	22 43	0 37	1 48	1 30	8 12	1 38	22 30	0 28	13 49	1 46	20 37	10 2	21 18	21 34	8 47	10 34	7 36			
T 5	6 2	15 42	1 35	1 16	3 22	17 2	3 28	22 38	0 38	1 51	1 30	8 9	1 38	22 30	0 28	13 49	1 46	20 36	10 2	21 18	21 35	8 44	10 35	7 35			
W 6	5 39	11 14	2 33	1 9	3 30	16 57	3 22	22 33	0 39	1 54	1 30	8 6	1 38	22 30	0 28	13 48	1 46	20 35	10 2	21 19	21 35	8 41	10 37	7 35			
T 7	5 16	6 21	3 24	0 57	3 35	16 52	3 16	22 27	0 40	1 57	1 30	8 4	1 39	22 30	0 28	13 48	1 46	20 35	10 2	21 20	21 36	8 38	10 38	7 34			
F 8	4 52	1 14	4 7	0 41	3 39	16 46	3 9	22 22	0 41	2 0	1 30	8 1	1 39	22 30	0 28	13 48	1 46	20 34	10 2	21 22	21 36	8 35	10 39	7 34			
S 9	4 29	3s58	4 38	0 21	3 40	16 40	3 3	22 16	0 42	2 3	1 30	7 58	1 39	22 30	0 28	13 47	1 46	20 34	10 2	21 23	21 37	8 32	10 41	7 33			
S 10	4 5	9 3	4 58	0s 2	3 39	16 33	2 57	22 10	0 43	2 6	1 30	7 55	1 39	22 30	0 28	13 47	1 46	20 34	10 2	21 25	21 37	8 29	10 42	7 33			
M 11	3 42	13 50	5 4	0 28	3 36	16 26	2 50	22 3	0 44	2 9	1 30	7 53	1 39	22 30	0 28	13 47	1 46	20 33	10 3	21 27	21 38	8 26	10 43	7 32			
T 12	3 18	18 7	4 57	0 57	3 31	16 19	2 44	21 57	0 44	2 12	1 30	7 50	1 39	22 31	0 28	13 47	1 47	20 33	10 3	21 29	21 38	8 23	10 44	7 31			
W 13	2 55	21 41	4 35	1 26	3 24	16 11	2 38	21 50	0 45	2 15	1 30	7 47	1 39	22 31	0 28	13 46	1 47	20 32	10 3	21 30	21 39	8 20	10 46	7 31			
T 14	2 31	24 16	3 59	1 57	3 16	16 2	2 32	21 43	0 46	2 19	1 31	7 44	1 39	22 31	0 28	13 46	1 47	20 32	10 3	21 31	21 39	8 17	10 47	7 30			
F 15	2 7	25 37	3 10	2 28	3 6	15 53	2 26	21 36	0 47	2 22	1 31	7 42	1 39	22 31	0 28	13 46	1 47	20 31	10 3	21 31	21 40	8 14	10 48	7 29			
S 16	1 43	25 32	2 9	2 59	2 54	15 44	2 19	21 29	0 48	2 25	1 31	7 39	1 39	22 31	0 28	13 45	1 47	20 31	10 3	21 31	21 40	8 11	10 49	7 29			
S 17	1 20	23 56	1 0	3 28	2 42	15 34	2 13	21 21	0 49	2 28	1 31	7 36	1 39	22 31	0 28	13 45	1 47	20 30	10 3	21 31	21 41	8 8	10 51	7 28			
M 18	0 56	20 48	0n15	3 57	2 28	15 24	2 7	21 13	0 50	2 31	1 31	7 34	1 39	22 31	0 28	13 45	1 47	20 30	10 4	21 31	21 41	8 5	10 52	7 27			
T 19	0 32	16 20	1 30	4 24	2 14	15 13	2 1	21 5	0 51	2 34	1 31	7 31	1 39	22 31	0 28	13 44	1 47	20 29	10 4	21 31	21 42	8 2	10 53	7 27			
W 20	0 8	10 47	2 41	4 48	1 59	15 2	1 55	20 57	0 52	2 37	1 31	7 28	1 39	22 31	0 28	13 44	1 47	20 29	10 4	21 32	21 42	7 59	10 54	7 26			
T 21	0n15	4 32	3 43	5 11	1 44	14 50	1 49	20 49	0 53	2 41	1 31	7 25	1 40	22 31	0 28	13 43	1 47	20 29	10 4	21 33	21 43	7 56	10 55	7 25			
F 22	0 39	2n 1	4 28	5 31	1 29	14 38	1 43	20 40	0 54	2 44	1 31	7 23	1 40	22 31	0 28	13 43	1 47	20 28	10 4	21 34	21 43	7 53	10 57	7 25			
S 23	1 3	8 24	4 55	5 49	1 15	14 25	1 37	20 32	0 55	2 47	1 31	7 20	1 40	22 31	0 28	13 43	1 47	20 28	10 4	21 36	21 44	7 50	10 58	7 24			
S 24	1 26	14 12	5 2	6 5	1 0	14 12	1 31	20 23	0 56	2 50	1 31	7 17	1 40	22 31	0 28	13 42	1 47	20 27	10 5	21 38	21 44	7 47	10 59	7 23			
M 25	1 50	19 4	4 48	6 17	0 45	13 59	1 25	20 14	0 57	2 53	1 31	7 15	1 40	22 31	0 28	13 42	1 47	20 27	10 5	21 39	21 45	7 44	11 0	7 23			
T 26	2 14	22 41	4 18	6 28	0 31	13 45	1 20	20 4	0 58	2 56	1 31	7 12	1 40	22 31	0 28	13 41	1 47	20 27	10 5	21 41	21 45	7 41	11 1	7 22			
W 27	2 37	24 54	3 34	6 36	0 17	13 30	1 14	19 55	0 59	2 59	1 31	7 10	1 40	22 31	0 28	13 41	1 47	20 26	10 5	21 41	21 46	7 38	11 2	7 21			
T 28	3 1	25 40	2 40	6 41	0 3	13 15	1 8	19 45	1 0	3 2	1 31	7 7	1 40	22 31	0 28	13 41	1 47	20 26	10 5	21 42	21 46	7 35	11 3	7 20			
F 29	3 24	25 2	1 39	6 45	0s10	13 0	1 3	19 36	1 1	3 5	1 31	7 4	1 40	22 31	0 28	13 40	1 47	20 26	10 6	21 42	21 47	7 32	11 4	7 20			
S 30	3 48	23 11	0 36	6 46	0 22	12 45	0 57	19 26	1 2	3 8	1 31	7 2	1 40	22 31	0 28	13 40	1 47	20 25	10 6	21 42	21 47	7 29	11 5	7 19			
S 31	4n11	20n20	0s28	6s44	0s34	12s29	0n52	19s16	1s 3	3n11	1n31	6s59	1s41	22n31	0n28	13s39	1n47	20s25	10s 6	21s42	21s48	7n26	11n 6	7s18			

ASTRODIENST EPHEMERIS for the year 2289

geocentric

APRIL 2289

00:00 UT

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

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
M 1	4n34	16n39	1s30	6s41	0s46	12s12	0n46	19s5	1s4	3n13	1n31	6s57	1s41	22n31	0n28	13s39
T 2	4 57	12 21	2 27	6 35	0 57	11 55	0 41	18 55	1 5	3 16	1 31	6 54	1 41	22 31	0 28	13 38
W 3	5 20	7 36	3 18	6 28	1 7	11 38	0 36	18 44	1 6	3 19	1 30	6 51	1 41	22 31	0 28	13 38
T 4	5 43	2 34	4 0	6 18	1 17	11 20	0 31	18 33	1 7	3 22	1 30	6 49	1 41	22 31	0 28	13 37
F 5	6 6	2s35	4 32	6 7	1 26	11 2	0 25	18 22	1 8	3 24	1 30	6 46	1 41	22 31	0 28	13 37
S 6	6 29	7 42	4 53	5 54	1 35	10 44	0 20	18 11	1 9	3 27	1 30	6 44	1 41	22 31	0 28	13 37
S 7	6 51	12 35	5 0	5 39	1 43	10 25	0 15	18 0	1 10	3 30	1 30	6 41	1 41	22 30	0 28	13 36
M 8	7 14	17 1	4 53	5 22	1 50	10 6	0 11	17 49	1 11	3 32	1 30	6 39	1 42	22 30	0 28	13 36
T 9	7 36	20 46	4 31	5 4	1 57	9 47	0 6	17 37	1 12	3 35	1 30	6 37	1 42	22 30	0 28	13 35
W10	7 59	23 34	3 56	4 44	2 4	9 27	0 1	17 25	1 13	3 37	1 30	6 34	1 42	22 30	0 28	13 35
T 11	8 21	25 11	3 8	4 23	2 10	9 7	0s4	17 13	1 14	3 39	1 30	6 32	1 42	22 30	0 28	13 34
F 12	8 43	25 26	2 9	4 0	2 15	8 46	0 8	17 1	1 15	3 42	1 30	6 29	1 42	22 30	0 28	13 34
S 13	9 4	24 12	1 2	3 35	2 20	8 26	0 13	16 49	1 16	3 44	1 30	6 27	1 42	22 30	0 28	13 33
S 14	9 26	21 32	0n10	3 10	2 24	8 4	0 17	16 37	1 17	3 46	1 29	6 25	1 42	22 30	0 28	13 33
M15	9 48	17 34	1 22	2 43	2 28	7 43	0 21	16 24	1 18	3 49	1 29	6 22	1 43	22 29	0 28	13 32
T 16	10 9	12 31	2 31	2 15	2 31	7 21	0 26	16 12	1 19	3 51	1 29	6 20	1 43	22 29	0 28	13 32
W17	10 30	6 43	3 32	1 45	2 34	6 59	0 30	15 59	1 20	3 53	1 29	6 18	1 43	22 29	0 28	13 31
T 18	10 51	0 29	4 19	1 14	2 36	6 37	0 34	15 46	1 21	3 55	1 29	6 15	1 43	22 29	0 28	13 31
F 19	11 12	5n49	4 50	0 42	2 37	6 15	0 38	15 33	1 22	3 57	1 29	6 13	1 43	22 29	0 28	13 30
S 20	11 33	11 46	5 1	0 9	2 38	5 52	0 42	15 20	1 23	3 59	1 29	6 11	1 43	22 29	0 28	13 30
S 21	11 53	17 1	4 52	0n25	2 39	5 29	0 45	15 7	1 24	4 0	1 28	6 9	1 44	22 28	0 28	13 29
M22	12 14	21 10	4 25	1 0	2 39	5 6	0 49	14 54	1 25	4 2	1 28	6 6	1 44	22 28	0 28	13 29
T 23	12 34	23 59	3 43	1 37	2 38	4 43	0 53	14 40	1 26	4 4	1 28	6 4	1 44	22 28	0 28	13 28
W24	12 54	25 19	2 49	2 14	2 37	4 19	0 56	14 26	1 27	4 5	1 28	6 2	1 44	22 28	0 28	13 28
T 25	13 13	25 10	1 47	2 52	2 36	3 55	1 0	14 13	1 28	4 7	1 28	6 0	1 44	22 27	0 28	13 27
F 26	13 33	23 42	0 42	3 31	2 33	3 31	1 3	13 59	1 30	4 8	1 28	5 58	1 44	22 27	0 28	13 27
S 27	13 52	21 6	0s23	4 11	2 31	3 7	1 6	13 45	1 31	4 10	1 27	5 56	1 45	22 27	0 28	13 26
S 28	14 11	17 38	1 26	4 52	2 28	2 43	1 9	13 31	1 32	4 11	1 27	5 54	1 45	22 27	0 28	13 26
M29	14 30	13 29	2 25	5 34	2 24	2 18	1 12	13 17	1 33	4 12	1 27	5 52	1 45	22 26	0 28	13 25
T 30	14n48	8n52	3s17	6n16	2s20	1s54	1s15	13s3	1s34	4n14	1n27	5s50	1s45	22n26	0n28	13s25

Julian Day Number = 2557190.5, Delta T = 278.76 sec
 Ecliptic obliquity = 23°24'10, Nutation = 0°00'16, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 28°47'00, Lahiri = 27°54'00

ASTRODIENST EPHEMERIS for the year 2289

geocentric

MAY 2289

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	14 36 59	11°02'11	10°25'10	23°25'23	29°16'29	0°21'0	22°38'22	19°25'19	19°33'44	11°R 2	1°51'1	18°R18	19°3 9	5°47'5	8°29'8	W 1
T 2	14 40 56	11°58'43	22°20'22	25°12'25	0°25'0	1°05'5	22°35'22	19°31'19	19°36'19	11°M 0	1°52'1	18°3 11	19°06'6	5°53'5	8°41'8	T 2
F 3	14 44 52	12°57'03	4°24'4	27°00'27	1°34'1	1°48'1	22°32'22	19°36'19	19°38'19	10°58'10	1°53'1	18°03'18	19°03'3	6°00'6	8°44'8	F 3
S 4	14 48 49	13°55'21	16°38'16	28°51'28	2°43'2	2°31'2	22°30'22	19°41'19	19°40'19	10°57'10	1°54'1	17°52'17	18°59'18	6°07'6	8°46'8	S 4
S 5	14 52 45	14°53'37	29°06'29	0°43'0	3°53'3	3°15'3	22°27'22	19°47'19	19°41'19	10°55'10	1°54'1	17°41'17	18°56'18	6°13'6	8°49'8	S 5
M 6	14 56 42	15°51'52	11°48'11	2°36'2	5°02'5	5°28'3	22°25'22	19°52'19	19°43'19	10°54'10	1°55'1	17°30'17	18°53'18	6°20'6	8°52'8	M 6
T 7	15 0 38	16°50'05	24°43'24	4°32'4	6°11'6	6°41'4	22°22'22	19°57'19	19°46'19	10°52'10	1°56'1	17°20'17	18°50'18	6°27'6	8°54'8	T 7
W 8	15 4 35	17°48'16	7°52'7	6°29'6	7°21'7	5°25'5	22°20'22	20°02'20	19°48'19	10°50'10	1°56'1	17°12'17	18°47'18	6°34'6	8°57'8	W 8
T 9	15 8 32	18°46'25	21°12'21	8°28'8	8°30'8	6°08'6	22°18'22	20°07'20	19°50'19	10°49'10	1°57'1	17°07'17	18°44'18	6°40'6	9°00'8	T 9
F 10	15 12 28	19°44'33	4°42'4	10°29'10	9°40'9	6°51'6	22°17'22	20°12'20	19°52'19	10°47'10	1°58'1	17°04'17	18°40'18	6°47'6	9°03'8	F 10
S 11	15 16 25	20°42'40	18°23'18	12°31'12	10°49'10	7°34'7	22°15'22	20°16'20	19°54'19	10°45'10	1°58'1	17°D 4	18°37'18	6°54'6	9°06'8	S 11
S 12	15 20 21	21°40'45	2°13'2	14°35'14	11°59'11	8°17'8	22°14'22	20°21'20	19°56'19	10°44'10	1°59'1	17°04'17	18°34'18	7°00'6	9°10'8	S 12
M13	15 24 18	22°38'49	16°12'16	16°40'16	13°09'9	9°01'9	22°13'22	20°26'20	19°59'19	10°42'10	1°59'1	17°R 5	18°31'18	7°07'6	9°13'8	M13
T14	15 28 14	23°36'51	0°19'0	18°46'18	14°19'14	9°44'9	22°12'22	20°30'20	20°01'20	10°41'10	2°00'2	17°05'17	18°28'18	7°14'6	9°16'8	T14
W15	15 32 11	24°34'52	14°34'20	20°54'20	15°29'15	10°27'10	22°11'22	20°35'20	20°03'20	10°39'10	2°00'2	17°03'17	18°25'18	7°20'6	9°20'8	W15
T16	15 36 07	25°32'52	28°54'23	23°03'16	16°39'11	11°10'11	22°10'22	20°39'20	20°06'20	10°38'10	2°01'2	17°00'17	18°21'18	7°27'6	9°24'8	T16
F17	15 40 04	26°30'50	13°15'13	25°13'25	17°49'17	11°53'11	22°10'22	20°44'20	20°08'20	10°36'10	2°01'2	16°54'16	18°18'18	7°34'6	9°27'8	F17
S18	15 44 01	27°28'47	27°33'27	27°24'27	18°59'18	12°36'12	22°10'22	20°48'20	20°11'20	10°34'10	2°01'2	16°46'16	18°15'18	7°40'6	9°31'8	S18
S19	15 47 57	28°26'43	11°44'11	29°35'29	20°09'20	13°19'13	22°D10	20°52'20	20°13'20	10°33'10	2°02'2	16°39'16	18°12'18	7°47'6	9°35'8	S19
M20	15 51 54	29°24'38	25°41'25	1°46'1	21°19'21	14°02'14	22°10'22	20°56'20	20°16'20	10°31'10	2°02'2	16°31'16	18°09'18	7°54'6	9°39'8	M20
T21	15 55 50	0°11'22	9°11'20	3°57'3	22°30'22	14°45'14	22°10'22	21°00'21	20°19'20	10°30'10	2°02'2	16°25'16	18°05'18	8°00'6	9°43'8	T21
W22	15 59 47	1°20'22	22°40'22	6°08'6	23°40'23	15°28'15	22°11'22	21°04'20	20°21'20	10°28'10	2°03'2	16°21'16	18°02'18	8°07'6	9°47'8	W22
T23	16 03 43	2°18'12	5°23'8	8°18'8	24°50'24	16°11'16	22°11'22	21°08'20	20°24'20	10°27'10	2°03'2	16°18'16	17°59'17	8°14'6	9°51'8	T23
F24	16 07 40	3°16'01	18°16'18	10°27'10	26°01'26	16°54'16	22°12'22	21°12'20	20°27'20	10°25'10	2°03'2	16°D18	17°56'17	8°21'6	9°55'8	F24
S25	16 11 36	4°13'48	0°27'3	12°35'12	27°11'27	17°37'17	22°13'22	21°16'20	20°29'20	10°24'10	2°03'2	16°18'16	17°53'17	8°27'6	10°00'8	S25
S26	16 15 33	5°11'33	12°43'12	14°42'14	28°22'28	18°20'18	22°15'22	21°19'20	20°32'20	10°22'10	2°04'2	16°20'16	17°50'17	8°34'6	10°04'8	S26
M27	16 19 30	6°09'16	24°39'24	16°47'16	29°32'29	19°03'19	22°16'22	21°23'20	20°35'20	10°21'10	2°04'2	16°21'16	17°46'17	8°41'6	10°09'8	M27
T28	16 23 26	7°06'59	6°11'31	18°50'18	0°43'0	19°45'19	22°18'22	21°27'20	20°38'20	10°20'10	2°04'2	16°R22	17°43'17	8°47'6	10°13'8	T28
W29	16 27 23	8°04'39	18°23'18	20°51'20	1°54'1	20°28'20	22°19'22	21°30'20	20°41'20	10°18'10	2°04'2	16°21'16	17°40'17	8°54'6	10°18'8	W29
T30	16 31 19	9°02'18	0°20'4	22°49'22	3°04'3	21°11'21	22°21'22	21°33'20	20°44'20	10°17'10	2°04'2	16°19'16	17°37'17	9°01'6	10°23'8	T30
F31	16 35 16	9°59'55	12°27'12	24°46'24	4°15'4	21°53'21	22°23'22	21°36'20	20°46'20	10°M15	2°H 4	16°3 15	17°3 34	9°47'7	10°28'8	F31

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	15n 6	3n57	4s 0	6n59	2s15	1s29	1s18	12s48	1s35	4n15	1n27	5s48	1s45	22n26	0n28	13s24	1n48	20s20	10s14	22s 9	22s 2	5n54	11n24	6s54			
T 2	15 24	1s 9	4 33	7 43	2 10	1 4	1 21	12 34	1 36	4 16	1 27	5 46	1 45	22 26	0 28	13 24	1 48	20 20	10 14	22 10	22 3	5 51	11 25	6 53			
F 3	15 42	6 15	4 55	8 28	2 4	0 39	1 23	12 20	1 37	4 17	1 26	5 44	1 46	22 25	0 28	13 23	1 48	20 20	10 15	22 11	22 3	5 48	11 25	6 52			
S 4	16 0	11 11	5 3	9 13	1 58	0 14	1 26	12 5	1 38	4 18	1 26	5 42	1 46	22 25	0 27	13 23	1 48	20 20	10 15	22 13	22 4	5 45	11 25	6 51			
S 5	16 17	15 46	4 57	9 58	1 51	0n11	1 28	11 50	1 39	4 19	1 26	5 40	1 46	22 25	0 27	13 22	1 48	20 20	10 15	22 14	22 4	5 42	11 25	6 51			
M 6	16 34	19 44	4 37	10 44	1 44	0 37	1 31	11 36	1 40	4 19	1 26	5 38	1 46	22 24	0 27	13 22	1 48	20 20	10 16	22 16	22 4	5 39	11 25	6 50			
T 7	16 50	22 49	4 2	11 30	1 36	1 2	1 33	11 21	1 41	4 20	1 26	5 36	1 46	22 24	0 27	13 21	1 48	20 20	10 16	22 17	22 5	5 36	11 25	6 49			
W 8	17 7	24 46	3 13	12 16	1 28	1 27	1 35	11 6	1 42	4 21	1 25	5 35	1 47	22 24	0 27	13 21	1 48	20 20	10 16	22 18	22 5	5 33	11 25	6 48			
T 9	17 23	25 20	2 14	13 3	1 20	1 53	1 37	10 51	1 43	4 21	1 25	5 33	1 47	22 24	0 27	13 20	1 48	20 20	10 17	22 19	22 6	5 30	11 25	6 48			
F 10	17 39	24 25	1 6	13 49	1 11	2 18	1 39	10 36	1 44	4 22	1 25	5 31	1 47	22 23	0 27	13 20	1 48	20 20	10 17	22 19	22 6	5 27	11 25	6 47			
S 11	17 54	22 2	0n 7	14 35	1 2	2 44	1 41	10 21	1 45	4 22	1 25	5 29	1 47	22 23	0 27	13 19	1 48	20 20	10 17	22 19	22 7	5 24	11 25	6 46			
S 12	18 9	18 20	1 20	15 21	0 52	3 9	1 43	10 5	1 46	4 22	1 25	5 28	1 47	22 23	0 27	13 19	1 48	20 20	10 17	22 19	22 7	5 21	11 25	6 45			
M13	18 24	13 34	2 30	16 7	0 43	3 35	1 44	9 50	1 47	4 23	1 24	5 26	1 48	22 22	0 27	13 18	1 48	20 20	10 18	22 19	22 8	5 18	11 25	6 45			
T14	18 39	8 3	3 31	16 52	0 32	4 1	1 46	9 35	1 48	4 23	1 24	5 24	1 48	22 22	0 27	13 18	1 48	20 21	10 18	22 19	22 8	5 15	11 24	6 44			
W15	18 53	2 5	4 19	17 36	0 22	4 26	1 47	9 19	1 49	4 23	1 24	5 23	1 48	22 21	0 27	13 17	1 48	20 21	10 18	22 19	22 8	5 12	11 24	6 43			
T16	19 7	4n 1	4 52	18 19	0 12	4 52	1 49	9 4	1 50	4 23	1 24	5 21	1 48	22 21	0 27	13 17	1 48	20 21	10 19	22 19	22 9	5 9	11 24	6 42			
F17	19 21	9 55	5 6	19 1	0 1	5 17	1 50	8 48	1 51	4 23	1 24	5 20	1 48	22 21	0 27	13 16	1 48	20 21	10 19	22 20	22 9	5 6	11 24	6 42			
S18	19 34	15 16	5 1	19 42	0n 9	5 43	1 51	8 33	1 52	4 23	1 23	5 18	1 49	22 20	0 27	13 16	1 48	20 21	10 19	22 21	22 10	5 3	11 24	6 41			
S 19	19 47	19 44	4 38	20 21	0 20	6 8	1 52	8 17	1 53	4 23	1 23	5 17	1 49	22 20	0 27	13 15	1 48	20 21	10 20	22 22	22 10	5 0	11 23	6 40			
M20	20 0	23 1	3 59	20 58	0 30	6 33	1 53	8 2	1 54	4 22	1 23	5 15	1 49	22 20	0 27	13 15	1 48	20 21	10 20	22 23	22 10	4 57	11 23	6 40			
T21	20 12	24 53	3 6	21 34	0 40	6 59	1 54	7 46	1 55	4 22	1 23	5 14	1 49	22 19	0 27	13 14	1 48	20 22	10 20	22 24	22 11	4 54	11 22	6 39			
W22	20 24	25 16	2 4	22 7	0 50	7 24	1 55	7 30	1 56	4 22	1 22	5 13	1 49	22 19	0 27	13 14	1 48	20 22	10 21	22 24	22 11	4 51	11 22	6 38			
T23	20 35	24 14	0 57	22 38	1 0	7 49	1 55	7 15	1 57	4 21	1 22	5 11	1 50	22 18	0 27	13 14	1 48	20 22	10 21	22 25	22 12	4 48	11 22	6 38			
F24	20 47	21 59	0s11	23 7	1 9	8 14	1 56	6 59	1 58	4 21	1 22	5 10	1 50	22 18	0 27	13 13	1 48	20 22	10 21	22 25	22 12	4 45	11 21	6 37			
S25	20 57	18 44	1 17	23 33	1 18	8 39	1 56	6 43	1 59	4 20	1 22	5 9	1 50	22 18	0 27	13 13	1 48	20 22	10 22	22 25	22 13	4 42	11 21	6 36			
S26	21 8	14 45	2 18	23 57	1 26	9 3	1 57	6 27	2 0	4 19	1 22	5 8	1 50	22 17	0 27	13 12	1 48	20 23	10 22	22 24	22 13	4 39	11 20	6 35			
M27	21 18	10 15	3 13	24 18	1 33	9 28	1 57	6 11	2 1	4 19	1 21	5 6	1 51	22 17	0 27	13 12	1 48	20 23	10 22	22 24	22 13	4 36	11 20	6 35			
T28	21 28	5 24	3 59	24 36	1 40	9 52	1 57	5 55	2 2	4 18	1 21	5 5	1 51	22 16	0 27	13 11	1 48	20 23	10 23	22 24	22 14	4 33	11 19	6 34			
W29	21 37	0 22	4 35	24 52	1 47	10 16	1 58	5 40	2 3	4 17	1 21	5 4	1 51	22 16	0 27	13 11	1 48	20 23	10 23	22 24	22 14	4 30	11 19	6 34			
T30	21 46	4s42	4 59	25 4	1 52	10 10	1 58	5 24	2 4	4 16	1 21	5 3	1 51	22 15	0 27	13 11	1 48	20 24	10 23	22 24	22 15	4 27	11 18	6 33			
F31	21n55	9s40	5s10	25n15	1n57	11n 4	1s58	5s 8	2s 5	4n15	1n20	5s 2	1s52	22n15	0n27	13s10	1n47	20s24	10s24	22s25	22s15	4n24	11n17	6s32			

ASTRODIENST EPHEMERIS for the year 2289

geocentric

JUNE 2289

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 39 12	10 ^{II} 57'32	24 ^{II} 47	26 ^{II} 40	5 ^{II} 26	22 ^{II} 36	22 ^{II} 26	21 ^{II} 40	20 ^{II} 49	10 ^{II} R14	2 ^{II} 4	16 ^{II} R11	17 ^{II} 31	9 ^{II} 14	10 ^{II} 233	S 1
S 2	16 43 9	11°55'06	7 ^{II} 23	28°31	6°37	23°18	22°28	21°43	20°52	10 ^{II} M13	2°R 4	16 ^{II} 3 5	17°27	9°21	10°38	S 2
M 3	16 47 5	12°52'40	20°16	0 ^{II} 19	7°47	24° 1	22°31	21°45	20°55	10°11	2° 4	15°59	17°24	9°27	10°43	M 3
T 4	16 51 2	13°50'12	3 ^{II} 28	2° 5	8°58	24°43	22°34	21°48	20°59	10°10	2° 4	15°54	17°21	9°34	10°48	T 4
W 5	16 54 59	14°47'43	16°57	3°48	10° 9	25°26	22°37	21°51	21° 2	10° 9	2° 4	15°51	17°18	9°41	10°53	W 5
T 6	16 58 55	15°45'14	0 ^{II} 30	5°28	11°20	26° 8	22°40	21°54	21° 5	10° 7	2° 4	15°48	17°15	9°48	10°58	T 6
F 7	17 2 52	16°42'43	14°37	7° 6	12°31	26°50	22°43	21°56	21° 8	10° 6	2° 4	15°D48	17°11	9°54	11° 3	F 7
S 8	17 6 48	17°40'11	28°42	8°40	13°42	27°32	22°46	21°59	21°11	10° 5	2° 4	15°48	17° 8	10° 1	11° 9	S 8
S 9	17 10 45	18°37'39	12 ^{II} 53	10°12	14°53	28°15	22°50	22° 1	21°14	10° 4	2° 3	15°49	17° 5	10° 8	11°14	S 9
M10	17 14 41	19°35'05	27° 7	11°40	16° 5	28°57	22°54	22° 4	21°17	10° 3	2° 3	15°51	17° 2	10°14	11°20	M10
T 11	17 18 38	20°32'31	11 ^{II} 22	13° 6	17°16	29°39	22°58	22° 6	21°21	10° 1	2° 3	15°52	16°59	10°21	11°25	T 11
W12	17 22 34	21°29'57	25°35	14°29	18°27	0 ^{II} 21	23° 2	22° 8	21°24	10° 0	2° 3	15°R52	16°56	10°28	11°31	W12
T 13	17 26 31	22°27'22	9 ^{II} 43	15°48	19°38	1° 3	23° 6	22°10	21°27	9°59	2° 3	15°51	16°52	10°34	11°37	T 13
F 14	17 30 28	23°24'46	23°45	17° 5	20°50	1°44	23°11	22°12	21°31	9°58	2° 2	15°49	16°49	10°41	11°43	F 14
S 15	17 34 24	24°22'10	7 ^{II} 39	18°18	22° 1	2°26	23°15	22°14	21°34	9°57	2° 2	15°47	16°46	10°48	11°48	S 15
S 16	17 38 21	25°19'34	21°22	19°29	23°12	3° 8	23°20	22°15	21°37	9°56	2° 2	15°44	16°43	10°55	11°54	S 16
M17	17 42 17	26°16'56	4 ^{II} 52	20°36	24°24	3°49	23°25	22°17	21°41	9°55	2° 1	15°41	16°40	11° 1	12° 0	M17
T 18	17 46 14	27°14'19	18° 8	21°39	25°35	4°31	23°30	22°19	21°44	9°54	2° 1	15°39	16°37	11° 8	12° 6	T 18
W19	17 50 10	28°11'40	1 ^{II} 8	22°40	26°47	5°12	23°35	22°20	21°47	9°53	2° 0	15°37	16°33	11°15	12°12	W19
T 20	17 54 7	29° 9'01	13°52	23°36	27°58	5°54	23°41	22°21	21°51	9°52	2° 0	15°D37	16°30	11°21	12°18	T 20
F 21	17 58 4	0 ^{II} 6'22	26°21	24°30	29°10	6°35	23°46	22°23	21°54	9°51	2° 0	15°37	16°27	11°28	12°25	F 21
S 22	18 2 0	1° 3'41	8 ^{II} 36	25°19	0 ^{II} 22	7°16	23°52	22°24	21°58	9°50	1°59	15°38	16°24	11°35	12°31	S 22
S 23	18 5 57	2° 1'00	20°39	26° 5	1°33	7°57	23°58	22°25	22° 1	9°49	1°59	15°39	16°21	11°41	12°37	S 23
M24	18 9 53	2°58'18	2 ^{II} 35	26°47	2°45	8°38	24° 4	22°26	22° 5	9°49	1°58	15°40	16°17	11°48	12°43	M24
T 25	18 13 50	3°55'35	14°27	27°25	3°57	9°19	24°10	22°27	22° 8	9°48	1°57	15°41	16°14	11°55	12°50	T 25
W26	18 17 46	4°52'52	26°20	27°59	5° 8	10° 0	24°16	22°27	22°12	9°47	1°57	15°42	16°11	12° 2	12°56	W26
T 27	18 21 43	5°50'07	8 ^{II} 17	28°29	6°20	10°40	24°22	22°28	22°15	9°46	1°56	15°R42	16° 8	12° 8	13° 3	T 27
F 28	18 25 39	6°47'22	20°23	28°55	7°32	11°21	24°29	22°29	22°19	9°46	1°56	15°42	16° 5	12°15	13° 9	F 28
S 29	18 29 36	7°44'37	2 ^{II} 44	29°16	8°44	12° 1	24°35	22°29	22°22	9°45	1°55	15°41	16° 2	12°22	13°16	S 29
S 30	18 33 33	8 ^{II} 41'51	15 ^{II} 22	29 ^{II} 32	9 ^{II} 55	12 ^{II} 42	24 ^{II} 42	22 ^{II} 29	22 ^{II} 26	9 ^{II} M44	1 ^{II} 54	15 ^{II} 30	15 ^{II} 38	12 ^{II} 28	13 ^{II} 22	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
S 1	22n 3	14s21	5 s 8	25n23	2n 1	11n28	1s57	4s52	2s 6	4n14	1n20	5s 1	1s52	22n14	0n27	13s10	1n47	20s24	10s24	22s25	22s16	4n21	11n17	6s32	
S 2	22 11	18 31	4 50	25 28	2 4	11 51	1 57	4 36	2 7	4 13	1 20	5 0	1 52	22 14	0 27	13 9	1 47	20 24	10 24	22 26	22 16	4 18	11 16	6 31	
M 3	22 18	21 55	4 18	25 31	2 7	12 15	1 57	4 20	2 8	4 11	1 20	4 59	1 52	22 13	0 27	13 9	1 47	20 25	10 25	22 27	22 16	4 15	11 15	6 30	
T 4	22 26	24 16	3 31	25 31	2 8	12 37	1 57	4 4	2 9	4 10	1 20	4 58	1 52	22 13	0 27	13 9	1 47	20 25	10 25	22 27	22 17	4 12	11 14	6 30	
W 5	22 32	25 16	2 31	25 30	2 9	13 0	1 56	3 48	2 10	4 9	1 19	4 57	1 53	22 12	0 27	13 8	1 47	20 25	10 25	22 28	22 17	4 9	11 14	6 29	
T 6	22 39	24 46	1 22	25 27	2 9	13 23	1 56	3 32	2 11	4 7	1 19	4 56	1 53	22 12	0 27	13 8	1 47	20 26	10 25	22 28	22 18	4 6	11 13	6 29	
F 7	22 44	22 43	0 6	25 21	2 9	13 45	1 55	3 16	2 12	4 6	1 19	4 56	1 53	22 12	0 27	13 8	1 47	20 26	10 26	22 28	22 18	4 3	11 12	6 28	
S 8	22 50	19 15	1n10	25 14	2 7	14 7	1 54	3 0	2 13	4 4	1 19	4 55	1 53	22 11	0 27	13 7	1 47	20 26	10 26	22 28	22 18	4 0	11 11	6 27	
S 9	22 55	14 38	2 23	25 5	2 5	14 28	1 53	2 44	2 14	4 2	1 19	4 54	1 54	22 11	0 27	13 7	1 47	20 27	10 26	22 28	22 19	3 57	11 10	6 27	
M10	23 0	9 12	3 28	24 55	2 2	14 50	1 53	2 29	2 15	4 1	1 18	4 53	1 54	22 10	0 27	13 7	1 47	20 27	10 27	22 28	22 19	3 54	11 9	6 26	
T 11	23 4	3 17	4 19	24 43	1 58	15 11	1 52	2 13	2 15	3 59	1 18	4 53	1 54	22 10	0 27	13 6	1 47	20 28	10 27	22 28	22 20	3 51	11 8	6 26	
W12	23 8	2n45	4 55	24 30	1 53	15 31	1 51	1 57	2 16	3 57	1 18	4 52	1 54	22 9	0 27	13 6	1 47	20 28	10 27	22 28	22 20	3 48	11 7	6 25	
T 13	23 11	8 38	5 12	24 15	1 48	15 51	1 50	1 41	2 17	3 55	1 18	4 52	1 55	22 8	0 27	13 6	1 47	20 28	10 28	22 28	22 20	3 45	11 6	6 25	
F 14	23 14	14 1	5 11	24 0	1 42	16 11	1 48	1 25	2 18	3 53	1 17	4 51	1 55	22 8	0 27	13 5	1 47	20 29	10 28	22 28	22 21	3 42	11 5	6 24	
S 15	23 17	18 38	4 52	23 43	1 35	16 31	1 47	1 10	2 19	3 51	1 17	4 51	1 55	22 7	0 27	13 5	1 47	20 29	10 28	22 28	22 21	3 39	11 4	6 23	
S 16	23 19	22 11	4 16	23 26	1 28	16 50	1 46	0 54	2 20	3 49	1 17	4 50	1 55	22 7	0 27	13 5	1 47	20 30	10 29	22 29	22 22	3 36	11 3	6 23	
M17	23 21	24 27	3 26	23 8	1 19	17 9	1 45	0 38	2 21	3 47	1 17	4 50	1 56	22 6	0 27	13 4	1 47	20 30	10 29	22 29	22 22	3 33	11 2	6 22	
T 18	23 22	25 18	2 26	22 49	1 10	17 27	1 43	0 22	2 22	3 45	1 17	4 49	1 56	22 6	0 27	13 4	1 47	20 30	10 29	22 29	22 22	3 30	11 1	6 22	
W19	23 23	24 43	1 19	22 30	1 1	17 45	1 42	0 7	2 22	3 43	1 16	4 49	1 56	22 5	0 27	13 4	1 47	20 31	10 29	22 29	22 23	3 27	11 0	6 21	
T 20	23 24	22 51	0 10	22 10	0 50	18 3	1 40	0n 9	2 23	3 40	1 16	4 49	1 56	22 5	0 27	13 4	1 47	20 31	10 30	22 29	22 23	3 24	10 59	6 21	
F 21	23 24	19 53	0s59	21 50	0 39	18 20	1 39	0 24	2 24	3 38	1 16	4 48	1 57	22 4	0 27	13 3	1 47	20 32	10 30	22 29	22 23	3 21	10 58	6 20	
S 22	23 24	16 6	2 4	21 30	0 28	18 37	1 37	0 40	2 25	3 36	1 16	4 48	1 57	22 4	0 27	13 3	1 47	20 32	10 30	22 29	22 24	3 18	10 56	6 20	
S 23	23 23	11 42	3 2	21 9	0 16	18 53	1 35	0 55	2 26	3 33	1 16	4 48	1 57	22 3	0 27	13 3	1 47	20 33	10 31	22 29	22 24	3 15	10 55	6 19	
M24	23 22	6 56	3 52	20 49	0 3	19 9	1 33	1 10	2 26	3 31	1 15	4 48	1 57	22 3	0 27	13 3	1 47	20 33	10 31	22 29	22 25	3 12	10 54	6 19	
T 25	23 21	1 56	4 31	20 28	0s10	19 24	1 32	1 26	2 27	3 28	1 15	4 48	1 58	22 2	0 27	13 3	1 47	20 34	10 31	22 29	22 25	3 9	10 53	6 19	
W26	23 19	3s 7	4 59	20 8	0 24	19 39	1 30	1 41	2 28	3 25	1 15	4 48	1 58	22 1	0 27	13 2	1 46	20 34	10 32	22 29	22 25	3 6	10 51	6 18	
T 27	23 16	8 5	5 14	19 48	0 39	19 54	1 28	1 56	2 29	3 23	1 15	4 48	1 58	22 1	0 27	13 2	1 46	20 34	10 32	22 29	22 26	3 3	10 50	6 18	
F 28	23 14	12 49	5 16	19 29	0 53	20 7	1 26	2 11	2 30	3 20	1 15	4 48	1 58	22 0	0 27	13 2	1 46	20 35	10 32	22 29	22 26	3 0	10 48	6 17	
S 29	23 11	17 8	5 3	19 9	1 8	20 21	1 24	2 26	2 30	3 17	1 14	4 48	1 59	22 0	0 27	13 2	1 46	20 35	10 32	22 29	22 27	2 57	10 47	6 17	
S 30	23n 7	20s48	4s35	18n51	1s24	20n34	1s22	2n41	2s31	3n14	1n14	4s48	1s59	21n59	0n27	13s 2	1n46	20s36	10s33	22s29	22s27	2n54	10n46	6s16	

ASTRODIENST EPHEMERIS for the year 2289

geocentric

JULY 2289

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Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	18 37 29	9°39'04	28°11'21	29°45'11	11°11'7	13°17'22	24°17'49	22°11'30	22°29'29	9°18'44	1°15'54	15°15'40	15°15'55	12°11'35	13°10'29	M 1
T 2	18 41 26	10°36'18	11°17'42	29°52'12	14°2'19	14°2'2	24°56'22	22°30'30	22°33'33	9°18'43	1°15'53	15°15'39	15°15'52	12°12'42	13°13'36	T 2
W 3	18 45 22	11°33'30	25°25'29	29°55'13	13°31'44	14°42'25	25°3'22	22°30'30	22°37'37	9°18'42	1°15'52	15°15'39	15°15'49	12°12'48	13°13'43	W 3
T 4	18 49 19	12°30'43	9°32'29	29°53'14	14°43'15	15°22'25	25°11'22	22°30'30	22°40'40	9°18'42	1°15'52	15°15'38	15°15'46	12°12'55	13°13'49	T 4
F 5	18 53 15	13°27'55	23°49'29	29°47'15	15°55'16	16°1'25	25°18'22	22°30'30	22°44'44	9°18'41	1°15'51	15°15'38	15°15'43	13°13'2	13°13'56	F 5
S 6	18 57 12	14°25'07	8°21'21	29°36'17	17°7'16	16°41'25	25°26'22	22°29'29	22°47'47	9°18'41	1°15'50	15°15'39	15°15'39	13°13°9	14°14°3	S 6
S 7	19 1 8	15°22'19	22°59'29	29°21'18	18°19'17	17°21'25	25°33'22	22°29'29	22°51'51	9°18'40	1°14'49	15°15'39	15°15'36	13°13°15	14°14°10	S 7
M 8	19 5 5	16°19'31	7°31'28	29°2'19	19°32'18	18°0'25	25°41'22	22°28'28	22°55'55	9°18'40	1°14'48	15°15'39	15°15°33	13°13°22	14°14°17	M 8
T 9	19 9 2	17°16'43	22°8'28	28°39'20	18°39'25	18°39'25	25°49'22	22°28'28	22°58'58	9°18'39	1°14'47	15°15'39	15°15°30	13°13°29	14°14°24	T 9
W10	19 12 58	18°13'56	6°19'29	28°12'21	19°18'25	19°18'25	25°57'22	22°27'27	23°2'2	9°18'39	1°14'47	15°15'38	15°15°27	13°13°35	14°14°31	W10
T 11	19 16 55	19°11'09	20°37'27	27°42'23	19°57'26	19°57'26	26°5'22	22°27'27	23°6'6	9°18'39	1°14'46	15°15'38	15°15°23	13°13°42	14°14°38	T 11
F 12	19 20 51	20°8'22	4°31'27	27°9'24	20°36'26	20°36'26	26°13'22	22°26'26	23°9'9	9°18'38	1°14'45	15°15'38	15°15°20	13°13°49	14°14°45	F 12
S 13	19 24 48	21°5'35	18°7'18	26°34'25	21°15'26	21°15'26	26°22'22	22°25'25	23°13'13	9°18'38	1°14'44	15°15'39	15°15°17	13°13°55	14°14°52	S 13
S 14	19 28 44	22°2'49	1°11'29	25°57'26	21°53'26	21°53'26	26°30'22	22°24'24	23°17'17	9°18'38	1°14'43	15°15'39	15°15°14	14°14°2	14°14°59	S 14
M15	19 32 41	23°0'04	14°35'25	25°19'27	22°31'26	22°31'26	26°39'22	22°23'23	23°20'20	9°18'38	1°14'42	15°15'40	15°15°11	14°14°9	15°15°7	M15
T 16	19 36 37	23°57'19	27°28'24	24°40'29	23°10'23	23°10'23	26°48'22	22°21'21	23°24'24	9°18'38	1°14'41	15°15'41	15°15°8	14°14°16	15°15°14	T 16
W17	19 40 34	24°54'34	10°7'24	24°2'0	23°48'26	23°48'26	26°56'22	22°20'20	23°27'27	9°18'37	1°14'40	15°15'41	15°15°4	14°14°22	15°15°21	W17
T 18	19 44 31	25°51'49	22°34'23	23°24'13	24°25'27	24°25'27	27°5'22	22°19'19	23°31'31	9°18'37	1°13'39	15°15'41	15°15°1	14°14°29	15°15°28	T 18
F 19	19 48 27	26°49'05	4°41'22	22°48'24	25°3'27	25°3'27	27°14'22	22°17'17	23°35'35	9°18'37	1°13'38	15°15'40	14°15°8	14°14°36	15°15°36	F 19
S 20	19 52 24	27°46'21	16°56'22	22°14'4	25°40'27	25°40'27	27°23'22	22°15'15	23°38'38	9°18'37	1°13'37	15°15'39	14°15°55	14°14°42	15°15°43	S 20
S 21	19 56 20	28°43'37	28°55'21	21°43'5	26°18'27	26°18'27	27°33'22	22°14'14	23°42'42	9°18'37	1°13'36	15°15'38	14°15°52	14°14°49	15°15°50	S 21
M22	20 0 17	29°40'53	10°11'49	21°15'6	26°55'27	26°55'27	27°42'22	22°12'12	23°46'46	9°18'37	1°13'35	15°15'36	14°15°49	14°14°56	15°15°58	M22
T 23	20 4 13	0°13'09	22°40'20	20°50'7	27°32'27	27°32'27	27°51'22	22°10'10	23°49'49	9°18'37	1°13'34	15°15'33	14°15°45	15°15°2	16°16°5	T 23
W24	20 8 10	1°35'26	4°31'20	20°31'8	28°8'28	28°8'28	28°1'22	22°8'8	23°53'53	9°18'37	1°13'33	15°15'31	14°15°42	15°15°9	16°16°12	W24
T 25	20 12 6	2°32'43	16°28'20	20°15'10	28°45'28	28°45'28	28°11'22	22°6'6	23°57'57	9°18'37	1°13'32	15°15'30	14°15°39	15°15°16	16°16°20	T 25
F 26	20 16 3	3°30'00	28°33'20	20°5'11	29°21'28	29°21'28	28°20'22	22°4'4	24°0'0	9°18'37	1°13'31	15°15'29	14°15°36	15°15°23	16°16°27	F 26
S 27	20 20 0	4°27'17	10°11'51	20°12'12	29°57'28	29°57'28	28°30'22	22°2'2	24°4'4	9°18'38	1°12'29	15°15'29	14°15°33	15°15°29	16°16°35	S 27
S 28	20 23 56	5°24'35	23°26'20	20°1'13	13°42'0	13°42'0	28°40'21	21°59'59	24°7'7	9°18'38	1°12'28	15°15'30	14°15°29	15°15°36	16°16°42	S 28
M29	20 27 53	6°21'53	6°11'20	8°14'14	5°5'1	5°5'1	28°50'21	21°57'57	24°11'11	9°18'38	1°12'27	15°15'31	14°15°26	15°15°43	16°16°50	M29
T 30	20 31 49	7°19'12	19°44'20	16°7'16	7°14'20	7°14'20	29°0'21	21°54'54	24°15'15	9°18'38	1°12'26	15°15'33	14°15°23	15°15°49	16°16°57	T 30
W31	20 35 46	8°16'31	3°32'20	20°39'17	28°20'28	28°20'28	29°10'21	21°52'52	24°18'18	9°18'39	1°12'25	15°15°34	14°15°20	15°15°56	17°17°5	W31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	23n 3	23s33	3s53	18n33	1s39	20n46	1s19	2n56	2s32	3n11	1n14	4s48	1s59	21n58	0n27	13s 1
T 2	22 59	25 5	2 57	18 16	1 55	20 58	1 17	3 11	2 33	3 8	1 14	4 48	2 0	21 58	0 27	13 1
W 3	22 54	25 9	1 50	18 0	2 11	21 9	1 15	3 26	2 33	3 5	1 14	4 48	2 0	21 57	0 27	13 1
T 4	22 49	23 38	0 34	17 45	2 27	21 19	1 13	3 40	2 34	3 2	1 14	4 49	2 0	21 57	0 27	13 1
F 5	22 43	20 34	0n45	17 31	2 43	21 29	1 11	3 55	2 35	2 59	1 13	4 49	2 0	21 56	0 27	13 1
S 6	22 37	16 10	2 3	17 18	2 58	21 39	1 8	4 9	2 35	2 56	1 13	4 49	2 1	21 56	0 27	13 1
S 7	22 31	10 48	3 13	17 6	3 14	21 48	1 6	4 24	2 36	2 53	1 13	4 50	2 1	21 55	0 27	13 1
M 8	22 24	4 50	4 10	16 55	3 28	21 56	1 3	4 38	2 37	2 50	1 13	4 50	2 1	21 54	0 27	13 1
T 9	22 17	1n20	4 51	16 46	3 42	22 4	1 1	4 52	2 37	2 46	1 13	4 51	2 1	21 54	0 27	13 1
W10	22 10	7 22	5 13	16 39	3 56	22 11	0 59	5 7	2 38	2 43	1 13	4 51	2 2	21 53	0 27	13 1
T 11	22 2	12 55	5 16	16 32	4 8	22 17	0 56	5 21	2 38	2 40	1 12	4 52	2 2	21 53	0 27	13 0
F 12	21 54	17 42	5 0	16 28	4 19	22 23	0 54	5 35	2 39	2 36	1 12	4 52	2 2	21 52	0 27	13 0
S 13	21 45	21 29	4 28	16 24	4 29	22 29	0 51	5 48	2 40	2 33	1 12	4 53	2 2	21 51	0 27	13 0
S 14	21 36	24 2	3 41	16 23	4 38	22 33	0 48	6 2	2 40	2 29	1 12	4 53	2 3	21 51	0 27	13 0
M15	21 27	25 14	2 44	16 22	4 45	22 37	0 46	6 16	2 41	2 26	1 12	4 54	2 3	21 50	0 27	13 0
T 16	21 17	25 2	1 39	16 23	4 50	22 41	0 43	6 29	2 41	2 22	1 12	4 55	2 3	21 49	0 27	13 0
W17	21 7	23 32	0 31	16 26	4 54	22 43	0 41	6 43	2 42	2 18	1 11	4 55	2 3	21 49	0 27	13 0
T 18	20 56	20 54	0s38	16 30	4 57	22 45	0 38	6 56	2 42	2 15	1 11	4 56	2 4	21 48	0 27	13 0
F 19	20 46	17 21	1 44	16 35	4 58	22 47	0 35	7 9	2 43	2 11	1 11	4 57	2 4	21 48	0 27	13 0
S 20	20 34	13 7	2 44	16 41	4 57	22 48	0 33	7 22	2 43	2 7	1 11	4 58	2 4	21 47	0 27	13 0
S 21	20 23	8 26	3 37	16 49	4 54	22 48	0 30	7 35	2 44	2 3	1 11	4 59	2 4	21 46	0 27	13 1
M22	20 11	3 30	4 19	16 57	4 50	22 47	0 28	7 48	2 44	2 0	1 11	5 0	2 4	21 46	0 27	13 1
T 23	19 59	1s33	4 51	17 7	4 44	22 46	0 25	8 1	2 45	1 56	1 10	5 1	2 5	21 45	0 27	13 1
W24	19 46	6 32	5 10	17 17	4 37	22 44	0 22	8 13	2 45	1 52	1 10	5 2	2 5	21 45	0 27	13 1
T 25	19 34	11 19	5 15	17 27	4 28	22 42	0 20	8 26	2 46	1 48	1 10	5 3	2 5	21 44	0 27	13 1
F 26	19 21	15 43	5 7	17 38	4 19	22 39	0 17	8 38	2 46	1 44	1 10	5 4	2 5	21 43	0 27	13 1
S 27	19 7	19 34	4 45	17 50	4 8	22 35	0 14	8 50	2 47	1 40	1 10	5 5	2 6	21 43	0 27	13 1
S 28	18 53	22 37	4 9	18 1	3 56	22 30	0 12	9 2	2 47	1 36	1 10	5 6	2 6	21 42	0 27	13 1
M29	18 39	24 37	3 19	18 13	3 43	22 25	0 9	9 14	2 47	1 32	1 10	5 7	2 6	21 41	0 27	13 1
T 30	18 25	25 17	2 18	18 24	3 30	22 20	0 6	9 26	2 48	1 28	1 9	5 8	2 6	21 41	0 27	13 1
W31	18n10	24s27	1s 6	18n36	3s16	22n13	0s 4	9n38	2s48	1n23	1n 9	5s10	2s 6	21n40	0n27	13s 2

Julian Day Number = 2557281.5, Delta T = 279.17 sec
 Ecliptic obliquity = 23°24'08, Nutation = 0°00'17, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 28°47'12, Lahiri = 27°54'13

ASTRODIENST EPHEMERIS for the year 2289
geocentric

AUGUST 2289

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	20 39 42	9♏13'50	17♌45	21♎3	18♏33	2♌54	29♐20	21°R49	24♏22	9♐39	1°R24	15°R34	14♌17	16♐3	17♏12	T 1
F 2	20 43 39	10°11'10	2♌20	21°34	19°46	3°28	29°31	21°K46	24°25	9°39	1°K22	15°R34	14°14	16°10	17°20	F 2
S 3	20 47 36	11° 8'31	17°13	22°10	20°59	4° 3	29°41	21°43	24°29	9°40	1°21	15°32	14°10	16°16	17°27	S 3
S 4	20 51 32	12° 5'52	2♌15	22°53	22°12	4°37	29°52	21°40	24°32	9°40	1°20	15°29	14° 7	16°23	17°35	S 4
M 5	20 55 29	13° 3'14	17°16	23°41	23°26	5°11	0♏ 2	21°37	24°36	9°41	1°19	15°25	14° 4	16°30	17°43	M 5
T 6	20 59 25	14° 0'38	2♌10	24°36	24°39	5°44	0°13	21°34	24°39	9°41	1°18	15°21	14° 1	16°36	17°50	T 6
W 7	21 3 22	14°58'02	16°47	25°36	25°52	6°18	0°24	21°31	24°43	9°42	1°16	15°18	13°58	16°43	17°58	W 7
T 8	21 7 18	15°55'27	1♌ 4	26°42	27° 5	6°51	0°34	21°28	24°46	9°42	1°15	15°16	13°55	16°50	18° 5	T 8
F 9	21 11 15	16°52'54	14°57	27°53	28°18	7°23	0°45	21°25	24°50	9°43	1°14	15°D15	13°51	16°56	18°13	F 9
S 10	21 15 11	17°50'22	28°28	29°10	29°32	7°56	0°56	21°21	24°53	9°43	1°13	15°16	13°48	17° 3	18°21	S 10
S 11	21 19 8	18°47'52	11♐38	0♏32	0♏45	8°28	1° 7	21°18	24°57	9°44	1°11	15°17	13°45	17°10	18°28	S 11
M12	21 23 4	19°45'22	24°28	1°59	1°58	9° 0	1°18	21°14	25° 0	9°45	1°10	15°18	13°42	17°17	18°36	M12
T 13	21 27 1	20°42'54	7♏ 3	3°30	3°12	9°31	1°29	21°11	25° 3	9°45	1° 9	15°20	13°39	17°23	18°43	T 13
W14	21 30 58	21°40'27	19°25	5° 6	4°25	10° 3	1°41	21° 7	25° 7	9°46	1° 7	15°R20	13°35	17°30	18°51	W14
T 15	21 34 54	22°38'01	1♏37	6°46	5°39	10°34	1°52	21° 4	25°10	9°47	1° 6	15°19	13°32	17°37	18°59	T 15
F 16	21 38 51	23°35'37	13°42	8°30	6°52	11° 4	2° 3	21° 0	25°13	9°48	1° 5	15°15	13°29	17°43	19° 6	F 16
S 17	21 42 47	24°33'13	25°40	10°17	8° 6	11°34	2°15	20°56	25°17	9°49	1° 4	15°10	13°26	17°50	19°14	S 17
S 18	21 46 44	25°30'51	7♐34	12° 8	9°19	12° 4	2°26	20°52	25°20	9°49	1° 2	15° 4	13°23	17°57	19°21	S 18
M19	21 50 40	26°28'30	19°25	14° 1	10°33	12°33	2°38	20°48	25°23	9°50	1° 1	14°56	13°20	18° 4	19°29	M19
T 20	21 54 37	27°26'10	1♏16	15°56	11°47	13° 3	2°49	20°44	25°27	9°51	1° 0	14°48	13°16	18°10	19°37	T 20
W21	21 58 33	28°23'51	13° 8	17°53	13° 0	13°31	3° 1	20°40	25°30	9°52	0°58	14°41	13°13	18°17	19°44	W21
T 22	22 2 30	29°21'33	25° 5	19°52	14°14	13°59	3°13	20°36	25°33	9°53	0°57	14°35	13°10	18°24	19°52	T 22
F 23	22 6 27	0♐19'16	7♐ 9	21°51	15°28	14°27	3°25	20°32	25°36	9°54	0°56	14°30	13° 7	18°30	19°59	F 23
S 24	22 10 23	1°17'00	19°25	23°51	16°41	14°55	3°36	20°28	25°39	9°55	0°54	14°27	13° 4	18°37	20° 7	S 24
S 25	22 14 20	2°14'46	1♌56	25°52	17°55	15°22	3°48	20°24	25°42	9°56	0°53	14°D27	13° 0	18°44	20°15	S 25
M26	22 18 16	3°12'32	14°48	27°53	19° 9	15°48	4° 0	20°19	25°45	9°58	0°52	14°27	12°57	18°51	20°22	M26
T 27	22 22 13	4°10'20	28° 3	29°54	20°23	16°15	4°12	20°15	25°49	9°59	0°50	14°28	12°54	18°57	20°30	T 27
W28	22 26 9	5° 8'09	11♌45	1♐54	21°37	16°40	4°24	20°11	25°52	10° 0	0°49	14°R29	12°51	19° 4	20°37	W28
T 29	22 30 6	6° 5'59	25°56	3°54	22°51	17° 6	4°36	20° 6	25°55	10° 1	0°48	14°29	12°48	19°11	20°45	T 29
F 30	22 34 2	7° 3'50	10♏33	5°54	24° 5	17°31	4°48	20° 2	25°58	10° 2	0°47	14°26	12°45	19°17	20°52	F 30
S 31	22 37 59	8♐ 1'43	25♏33	7♐52	25♏19	17♌55	5♏ 1	19°K57	26° 0	10♐ 3	0°K45	14°R21	12°R41	19♐24	21♏ 0	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	decl	lat	decl	lat	
T 1	17n55	22s 2	0n12	18n46	3s 1	22n 6	0s 1	9n49	2s48	1n19	1n 9	5s11	2s 7	21n40	0n27	13s 2	1n44	20s54	10s40	22s30	22s38	1n19	9n49	6s 7										
F 2	17 40	18 8	1 31	18 57	2 46	21 59	0n 2	10 1	2 49	1 15	1 9	5 12	2 7	21 39	0 27	13 2	1 44	20 54	10 40	22 30	22 39	1 16	9 47	6 7										
S 3	17 24	13 2	2 45	19 6	2 31	21 50	0 4	10 12	2 49	1 11	1 9	5 13	2 7	21 38	0 27	13 2	1 44	20 55	10 40	22 30	22 39	1 13	9 45	6 7										
S 4	17 8	7 6	3 49	19 14	2 15	21 41	0 7	10 23	2 49	1 7	1 9	5 15	2 7	21 38	0 27	13 2	1 44	20 56	10 40	22 30	22 39	1 10	9 43	6 7										
M 5	16 52	0 47	4 36	19 22	2 0	21 32	0 9	10 34	2 49	1 2	1 9	5 16	2 8	21 37	0 27	13 2	1 44	20 56	10 40	22 31	22 40	1 7	9 41	6 6										
T 6	16 36	5n31	5 5	19 28	1 44	21 22	0 12	10 45	2 50	0 58	1 9	5 18	2 8	21 37	0 27	13 3	1 44	20 57	10 41	22 31	22 40	1 4	9 39	6 6										
W 7	16 19	11 24	5 13	19 32	1 28	21 11	0 15	10 55	2 50	0 54	1 9	5 19	2 8	21 36	0 27	13 3	1 44	20 57	10 41	22 32	22 40	1 1	9 36	6 6										
T 8	16 2	16 32	5 1	19 35	1 13	20 59	0 17	11 6	2 50	0 49	1 8	5 20	2 8	21 35	0 27	13 3	1 44	20 58	10 41	22 32	22 41	0 58	9 34	6 6										
F 9	15 45	20 38	4 32	19 36	0 58	20 47	0 20	11 16	2 50	0 45	1 8	5 22	2 8	21 35	0 27	13 3	1 44	20 59	10 41	22 32	22 41	0 55	9 32	6 6										
S 10	15 28	23 30	3 48	19 36	0 43	20 35	0 22	11 27	2 50	0 40	1 8	5 23	2 9	21 34	0 27	13 4	1 44	20 59	10 41	22 32	22 41	0 52	9 30	6 6										
S 11	15 10	25 1	2 54	19 33	0 29	20 21	0 24	11 37	2 50	0 36	1 8	5 25	2 9	21 34	0 27	13 4	1 44	21 0	10 41	22 32	22 42	0 49	9 28	6 6										
M12	14 52	25 9	1 51	19 27	0 15	20 8	0 27	11 47	2 51	0 31	1 8	5 27	2 9	21 33	0 28	13 4	1 44	21 0	10 41	22 32	22 42	0 46	9 26	6 6										
T 13	14 34	23 58	0 45	19 19	0 1	19 53	0 29	11 57	2 51	0 27	1 8	5 28	2 9	21 32	0 28	13 4	1 44	21 1	10 41	22 31	22 42	0 43	9 23	6 6										
W14	14 16	21 38	0s22	19 9	0n12	19 38	0 32	12 6	2 51	0 22	1 8	5 30	2 9	21 32	0 28	13 5	1 44	21 1	10 41	22 31	22 43	0 40	9 21	6 6										
T 15	13 57	18 21	1 28	18 56	0 24	19 23	0 34	12 16	2 51	0 18	1 8	5 31	2 9	21 31	0 28	13 5	1 44	21 2	10 42	22 32	22 43	0 37	9 19	6 6										
F 16	13 38	14 19	2 28	18 41	0 35	19 7	0 36	12 25	2 51	0 13	1 8	5 33	2 10	21 31	0 28	13 5	1 44	21 2	10 42	22 32	22 43	0 34	9 17	6 5										
S 17	13 19	9 47	3 21	18 22	0 46	18 50	0 38	12 34	2 51	0 8	1 7	5 35	2 10	21 30	0 28	13 6	1 44	21 3	10 42	22 32	22 44	0 31	9 14	6 5										
S 18	13 0	4 55	4 5	18 1	0 56	18 33	0 41	12 43	2 51	0 4	1 7	5 36	2 10	21 29	0 28	13 6	1 44	21 4	10 42	22 33	22 44	0 28	9 12	6 5										
M19	12 40	0s 5	4 39	17 38	1 5	18 15	0 43	12 52	2 51	0s 1	1 7	5 38	2 10	21 29	0 28	13 6	1 43	21 4	10 42	22 34	22 44	0 25	9 10	6 5										
T 20	12 21	5 5	5 0	17 12	1 13	17 57	0 45	13 1	2 51	0 6	1 7	5 40	2 10	21 28	0 28	13 7	1 43	21 5	10 42	22 35	22 44	0 23	9 7	6 5										
W21	12 1	9 54	5 8	16 43	1 20	17 38	0 47	13 10	2 51	0 10	1 7	5 41	2 10	21 28	0 28	13 7	1 43	21 5	10 42	22 36	22 45	0 20	9 5	6 5										
T 22	11 41	14 23	5 3	16 12	1 26	17 19	0 49	13 18	2 50	0 15	1 7	5 43	2 11	21 27	0 28	13 7	1 43	21 6	10 42	22 36	22 45	0 17	9 3	6 5										
F 23	11 21	18 22	4 45	15 39	1 31	16 59	0 51	13 26	2 50	0 20	1 7	5 45	2 11	21 27	0 28	13 8	1 43	21 6	10 42	22 37	22 45	0 14	9 0	6 5										
S 24	11 0	21 37	4 13	15 3	1 36	16 39	0 53	13 34	2 50	0 25	1 7	5 47	2 11	21 26	0 28	13 8	1 43	21 7	10 42	22 37	22 46	0 11	8 58	6 5										
S 25	10 40	23 56	3 29	14 26	1 39	16 18	0 55	13 42	2 50	0 29	1 7	5 48	2 11	21 25	0 28	13 8	1 43	21 7	10 42	22 37	22 46	0 8	8 56	6 5										
M26	10 19	25 4	2 33	13 47	1 42	15 57	0 57	13 50	2 50	0 34	1 7	5 50	2 11	21 25	0 28	13 9	1 43	21 8	10 42	22 37	22 46	0 5	8 53	6 5										
T 27	9 58	24 51	1 27	13 7	1 44	15 36	0 59	13 58	2 50	0 39	1 7	5 52	2 11	21 24	0 28	13 9	1 43	21 8	10 42	22 37	22 47	0 2	8 51	6 6										
W28	9 37	23 8	0 15	12 25	1 45	15 14	1 0	14 5	2 49	0 44	1 7	5 54	2 11	21 24	0 28	13 10	1 43	21 9	10 42	22 37	22 47	0s 1	8 49	6 6										
T 29	9 16	19 56	1n 1	11 42	1 46	14 51	1 2	14 13	2 49	0 49	1 6	5 56	2 11	21 23	0 28	13 10	1 43	21 9	10 42	22 37	22 47	0 4	8 46	6 6										
F 30	8 54	15 24	2 15	10 58	1 46	14 29	1 4	14 20	2 49	0 53	1 6	5 58	2 12	21 23	0 28	13 10	1 43	21 10	10 42	22 37	22 48	0 7	8 44	6 6										
S 31	8n33	9s49	3n22	10n13	1n45	14n 5	1n 5	14n27	2s48	0s58	1n 6	5s59	2s12	21n22	0n28	13s11	1n43	21s10	10s42	22s38	22s48	0s10	8n41	6s 6										

ASTRODIENST EPHEMERIS for the year 2289

geocentric

SEPTEMBER 2289

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 41 56	8 ^h 59 ^m 37 ^s	10 ^h 47 ^m	9 ^h 50 ^m	26 ^h 23 ^m	18 ^h 19 ^m	5 ^h 13 ^m	19 ^h 53 ^m	26 ^h 3 ^m	10 ^h 10 ^m	0 ^h 44 ^m	14 ^h 15 ^m	12 ^h 38 ^m	19 ^h 31 ^m	21 ^h 07 ^m	S 1
M 2	22 45 52	9 ^h 57 ^m 32 ^s	26° 5	11°46	27°47	18°42	5°25	19 ^h 49 ^m	26° 6	10° 6	0 ^h 43 ^m	14 ^h 3 ^m	12°35	19°38	21°14	M 2
T 3	22 49 49	10°55'29	11 ^h 16 ^m	13°41	29° 1	19° 5	5°37	19°44	26° 9	10° 7	0°41	13°58	12°32	19°44	21°22	T 3
W 4	22 53 45	11°53'28	26°10	15°36	0 ^h 15 ^m	19°27	5°50	19°40	26°12	10° 9	0°40	13°51	12°29	19°51	21°29	W 4
T 5	22 57 42	12°51'28	10 ^h 39 ^m	17°29	1°29	19°49	6° 2	19°35	26°15	10°10	0°39	13°45	12°26	19°58	21°37	T 5
F 6	23 1 38	13°49'31	24°41	19°20	2°43	20°10	6°14	19°30	26°17	10°11	0°38	13°41	12°22	20° 4	21°44	F 6
S 7	23 5 35	14°47'36	8 ^h 14 ^m	21°11	3°57	20°31	6°27	19°26	26°20	10°13	0°36	13°40	12°19	20°11	21°51	S 7
S 8	23 9 31	15°45'42	21°22	23° 1	5°12	20°51	6°39	19°21	26°23	10°14	0°35	13°D39	12°16	20°18	21°59	S 8
M 9	23 13 28	16°43'50	4 ^h 6 ^m	24°49	6°26	21°11	6°52	19°17	26°26	10°16	0°34	13°40	12°13	20°25	22° 6	M 9
T 10	23 17 25	17°42'01	16°32	26°36	7°40	21°30	7° 4	19°12	26°28	10°17	0°33	13°R40	12°10	20°31	22°13	T 10
W11	23 21 21	18°40'13	28°45	28°22	8°55	21°48	7°17	19° 8	26°31	10°19	0°31	13°39	12° 6	20°38	22°20	W11
T 12	23 25 18	19°38'27	10 ^h 47 ^m	0 ^h 6 ^m	10° 9	22° 6	7°30	19° 3	26°33	10°20	0°30	13°36	12° 3	20°45	22°27	T 12
F 13	23 29 14	20°36'43	22°43	1°50	11°23	22°23	7°42	18°58	26°36	10°22	0°29	13°30	12° 0	20°51	22°34	F 13
S 14	23 33 11	21°35'01	4 ^h 35 ^m	3°32	12°38	22°39	7°55	18°54	26°38	10°24	0°28	13°21	11°57	20°58	22°42	S 14
S 15	23 37 7	22°33'21	16°26	5°13	13°52	22°55	8° 8	18°49	26°41	10°25	0°26	13°10	11°54	21° 5	22°49	S 15
M16	23 41 4	23°31'43	28°18	6°53	15° 7	23°10	8°20	18°45	26°43	10°27	0°25	12°57	11°51	21°11	22°56	M16
T 17	23 45 0	24°30'06	10 ^h 41 ^m	8°32	16°21	23°24	8°33	18°40	26°45	10°29	0°24	12°44	11°47	21°18	23° 3	T 17
W18	23 48 57	25°28'31	22° 7	10°10	17°36	23°38	8°46	18°35	26°48	10°30	0°23	12°31	11°44	21°25	23°10	W18
T 19	23 52 54	26°26'58	4 ^h 11 ^m	9	11°46	18°50	23°51	8°59	18°31	10°32	0°22	12°20	11°41	21°32	23°17	T 19
F 20	23 56 50	27°25'27	16°17	13°22	20° 5	24° 3	9°12	18°26	26°52	10°34	0°21	12°11	11°38	21°38	23°23	F 20
S 21	0 0 47	28°23'57	28°35	14°57	21°19	24°14	9°24	18°22	26°54	10°35	0°19	12° 5	11°35	21°45	23°30	S 21
S 22	0 4 43	29°22'29	11 ^h 17 ^m	6	16°30	22°34	24°25	9°37	18°17	10°37	0°18	12° 2	11°32	21°52	23°37	S 22
M23	0 8 40	0 ^h 21'02	23°54	18° 3	23°48	24°35	9°50	18°13	26°58	10°39	0°17	12° 1	11°28	21°58	23°44	M23
T 24	0 12 36	1°19'38	7 ^h 3 ^m	19°34	25° 3	24°44	10° 3	18° 8	27° 1	10°41	0°16	12° 0	11°25	22° 5	23°51	T 24
W25	0 16 33	2°18'15	20°36	21° 4	26°18	24°52	10°16	18° 4	27° 3	10°43	0°15	12° 0	11°22	22°12	23°57	W25
T 26	0 20 29	3°16'53	4 ^h 36 ^m	22°34	27°32	25° 0	10°29	18° 0	27° 4	10°45	0°14	11°59	11°19	22°19	24° 4	T 26
F 27	0 24 26	4°15'33	19° 3	24° 2	28°47	25° 7	10°42	17°55	27° 6	10°46	0°13	11°55	11°16	22°25	24°10	F 27
S 28	0 28 23	5°14'15	3 ^h 55 ^m	25°29	0 ^h 2	25°13	10°55	17°51	27° 8	10°48	0°12	11°49	11°12	22°32	24°17	S 28
S 29	0 32 19	6°12'58	19° 4	26°56	1°16	25°18	11° 8	17°47	27°10	10°50	0°11	11°40	11° 9	22°39	24°23	S 29
M30	0 36 16	7 ^h 11'44	4 ^h 23 ^m	28 ^h 21 ^m	2 ^h 31 ^m	25 ^h 22 ^m	11 ^h 21 ^m	17 ^h 43 ^m	27 ^h 12 ^m	10 ^h 52 ^m	0 ^h 10 ^m	11 ^h 29 ^m	11 ^h 3 ^m	22 ^h 45 ^m	24 ^h 30 ^m	M30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	8n11	3s35	4n15	9n28	1n43	13n42	1n 7	14n34	2s48	1s 3	1n 6	6s 1	2s12	21n22	0n28	13s11	1n43	21s11	10s43	22s39	22s48	0s13	8n39	6s 6	7s 1	18s12	23s21	23s29	23s37	
M 2	7 49	2n53	4 50	8 42	1 41	13 18	1 8	14 41	2 48	1 8	1 6	6 3	2 12	21 21	0 28	13 12	1 43	21 11	10 43	22 39	22 48	0 16	8 37	6 6	7 5	18 4	23 13	23 21	23 29	
T 3	7 28	9 7	5 5	7 55	1 38	12 53	1 10	14 47	2 47	1 13	1 6	6 5	2 12	21 21	0 28	13 12	1 43	21 12	10 43	22 40	22 49	0 19	8 34	6 6	7 4	18 3	23 12	23 20	23 28	
W 4	7 6	14 43	4 58	7 8	1 35	12 29	1 11	14 54	2 47	1 18	1 6	6 7	2 12	21 20	0 28	13 13	1 43	21 12	10 43	22 41	22 49	0 22	8 32	6 6	7 3	18 2	23 11	23 19	23 27	
T 5	6 43	19 18	4 32	6 21	1 32	12 3	1 12	15 0	2 46	1 23	1 6	6 9	2 12	21 20	0 28	13 13	1 43	21 13	10 43	22 42	22 49	0 24	8 29	6 6	7 2	18 1	23 10	23 18	23 26	
F 6	6 21	22 38	3 51	5 33	1 28	11 38	1 14	15 6	2 46	1 28	1 6	6 10	2 12	21 19	0 28	13 14	1 43	21 13	10 43	22 42	22 50	0 27	8 27	6 6	7 1	18 0	23 9	23 17	23 25	
S 7	5 59	24 34	2 57	4 46	1 23	11 12	1 15	15 12	2 45	1 33	1 6	6 12	2 12	21 19	0 28	13 14	1 43	21 14	10 43	22 42	22 50	0 30	8 25	6 7	7 0	17 59	23 8	23 16	23 24	
S 8	5 36	25 3	1 56	3 58	1 18	10 46	1 16	15 18	2 44	1 38	1 6	6 14	2 12	21 18	0 28	13 15	1 42	21 14	10 42	22 42	22 50	0 33	8 22	6 7	6 59	17 58	23 7	23 15	23 23	
M 9	5 14	24 11	0 51	3 11	1 13	10 20	1 17	15 23	2 44	1 43	1 6	6 16	2 12	21 18	0 28	13 15	1 42	21 15	10 42	22 42	22 51	0 36	8 20	6 7	6 58	17 57	23 6	23 14	23 22	
T 10	4 51	22 8	0s15	2 23	1 8	9 53	1 18	15 29	2 43	1 48	1 6	6 18	2 12	21 17	0 28	13 16	1 42	21 15	10 42	22 42	22 51	0 39	8 17	6 7	6 57	17 56	23 5	23 13	23 21	
W11	4 29	19 5	1 19	1 36	1 2	9 26	1 19	15 34	2 42	1 53	1 6	6 20	2 13	21 17	0 28	13 16	1 42	21 15	10 42	22 42	22 51	0 42	8 15	6 7	6 56	17 55	23 4	23 12	23 20	
T 12	4 6	15 16	2 19	0 49	0 56	8 59	1 20	15 39	2 42	1 58	1 6	6 22	2 13	21 16	0 28	13 17	1 42	21 16	10 42	22 43	22 51	0 45	8 12	6 7	6 55	17 54	23 3	23 11	23 19	
F 13	3 43	10 54	3 12	0 2	0 50	8 32	1 21	15 45	2 41	2 3	1 6	6 23	2 13	21 16	0 28	13 17	1 42	21 16	10 42	22 43	22 52	0 48	8 10	6 8	6 54	17 53	23 2	23 10	23 18	
S 14	3 20	6 9	3 56	0s44	0 43	8 4	1 22	15 49	2 40	2 8	1 6	6 25	2 13	21 15	0 28	13 18	1 42	21 17	10 42	22 44	22 52	0 51	8 8	6 8	6 53	17 52	23 1	23 9	23 17	
S 15	2 57	1 12	4 29	1 30	0 37	7 36	1 22	15 54	2 39	2 13	1 6	6 27	2 13	21 15	0 28	13 18	1 42	21 17	10 42	22 45	22 52	0 54	8 5	6 8	6 52	17 51	23 0	23 8	23 16	
M16	2 34	3s47	4 51	2 16	0 30	7 8	1 23	15 59	2 38	2 18	1 6	6 29	2 13	21 15	0 28	13 19	1 42	21 17	10 42	22 46	22 53	0 57	8 3	6 8	6 51	17 50	22 59	23 7	23 15	
T 17	2 11	8 38	5 1	3 1	0 23	6 40	1 23	16 3	2 37	2 23	1 5	6 31	2 13	21 14	0 28	13 19	1 42	21 18	10 42	22 48	22 53	0 59	8 0	6 8	6 50	17 49	22 58	23 6	23 14	
W18	1 48	13 11	4 57	3 46	0 16	6 11	1 24	16 8	2 36	2 28	1 5	6 33	2 13	21 14	0 28	13 20	1 42	21 18	10 42	22 49	22 53	1 2	7 58	6 9	6 49	17 48	22 57	23 5	23 13	
T 19	1 25	17 16	4 40	4 31	0 9	5 42	1 24	16 12	2 35	2 33	1 5	6 34	2 13	21 13	0 28	13 21	1 42	21 18	10 42	22 50	22 53	1 5	7 55	6 9	6 48	17 47	22 56	23 4	23 12	
F 20	1 1	20 40	4 10	5 15	0 1	5 13	1 25	16 16	2 34	2 38	1 5	6 36	2 13	21 13	0 28	13 21	1 42	21 19	10 42	22 51	22 54	1 8	7 53	6 9	6 47	17 46	22 55	23 3	23 11	
S 21	0 38	23 12	3 28	5 58	0s 6	4 44	1 25	16 20	2 33	2 43	1 5	6 38	2 13	21 13	0 28	13 22	1 42	21 19	10 42	22 51	22 54	1 11	7 51	6 9	6 46	17 45	22 54	23 2	23 10	
S 22	0 15	24 39	2 36	6 41	0 13	4 15	1 25	16 23	2 32	2 48	1 5	6 40	2 13	21 12	0 29	13 22	1 42	21 20	10 42	22 52	22 54	1 14	7 48	6 10	6 45	17 44	22 53	23 1	23 9	
M23	0s 8	24 50	1 34	7 23	0 21	3 46	1 26	16 27	2 31	2 53	1 5	6 41	2 13	21 12	0 29	13 23	1 42	21 20	10 42	22 52	22 54	1 17	7 46	6 10	6 44	17 43	22 52	23 0	23 8	
T 24	0 32	23 39	0 26	8 5	0 29	3 16	1 26	16 30	2 29	2 58	1 5	6 43	2 13	21 11	0 29	13 23	1 42	21 20	10 42	22 52	22 55	1 20	7 43	6 10	6 43	17 42	22 51	22 59	23 7	
W25	0 55	21 5	0n45	8 46	0 36	2 47	1 26	16 34	2 28	3 3	1 5	6 45	2 13	21 11	0 29	13 24	1 42	21 20	10 41	22 52	22 55	1 23	7 41	6 10	6 42	17 41	22 50	22 58	23 6	
T 26	1 18	17 12	1 56	9 27	0 44	2 17	1 26	16 37	2 27	3 9	1 5	6 47	2 13	21 11	0 29	13 25	1 42	21 21	10 41	22 52	22 55	1 26	7 39	6 11	6 41	17 40	22 49	22 57	23 5	
F 27	1 41	12 12	3 2	10 6	0 51	1 48	1 26	16 40	2 25	3 14	1 5	6 48	2 13	21 10	0 29	13 25	1 42	21 21	10 41	22 52	22 56	1 29	7 36	6 11	6 40	17 39	22 48	22 56	23 4	
S 28	2 5	6 22	3 58	10 45	0 59	1 48	1 25	16 43	2 24	3 19	1 5	6 50	2 13	21 10	0 29	13 26	1 42	21 21	10 41	22 53	22 56	1 31	7 34	6 11	6 39	17 38	22 47	22 55	23 3	
S 29	2 28	0 4	4 37	11 24	1 7	0 18	1 25	16 45	2 22	3 24	1 5	6 52	2 13	21 10	0 29	13 27	1 42	21 22	10 41	22 53	22 56	1 34	7 31	6 12	6 38	17 37	22 46	22 54	23 2	
M30	2s51	6n18	4n58	12s 1	1s14	0n18	1n25	16n48	2s21	3s29	1n 5	6s53	2s13	21n 9	0n29	13s27	1n42	21s22	10s41	22s54	22s56	1s37	7n29	6s12	7s 0	18s 0	23s 0	23s 0	23s 0	23s 0

ASTRODIENST EPHEMERIS for the year 2289
geocentric

OCTOBER 2289

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 40 12	8♂10'31	19♂38	29♂45	3♂46	25♂25	11♂34	17°R38	27♂14	10♂54	0°R 9	11°R18	11♂3 3	22♂52	24♂36	T 1
W 2	0 44 9	9° 9'20	4♂40	1♂8	5° 1	25°28	11°47	17♂34	27°15	10°56	0°R 8	11♂3 8	11° 0	22°59	24°43	W 2
T 3	0 48 5	10° 8'12	19°19	2°29	6°15	25°30	12° 0	17°30	27°17	10°58	0° 7	10°59	10°57	23° 6	24°49	T 3
F 4	0 52 2	11° 7'06	3♂30	3°50	7°30	25°R30	12°13	17°26	27°18	11° 0	0° 6	10°53	10°53	23°12	24°55	F 4
S 5	0 55 58	12° 6'02	17°11	5° 9	8°45	25°30	12°26	17°22	27°20	11° 2	0° 5	10°50	10°50	23°19	25° 1	S 5
S 6	0 59 55	13° 5'00	0♂22	6°28	10° 0	25°29	12°38	17°18	27°21	11° 4	0° 4	10°49	10°47	23°26	25° 7	S 6
M 7	1 3 51	14° 4'01	13° 9	7°44	11°15	25°27	12°51	17°15	27°23	11° 6	0° 3	10°49	10°44	23°33	25°13	M 7
T 8	1 7 48	15° 3'04	25°34	9° 0	12°30	25°25	13° 4	17°11	27°24	11° 8	0° 3	10°48	10°41	23°39	25°19	T 8
W 9	1 11 45	16° 2'09	7♂44	10°13	13°45	25°21	13°17	17° 7	27°26	11°10	0° 2	10°47	10°38	23°46	25°25	W 9
T 10	1 15 41	17° 1'16	19°42	11°26	15° 0	25°16	13°30	17° 3	27°27	11°12	0° 1	10°43	10°34	23°53	25°31	T 10
F 11	1 19 38	18° 0'26	1♂35	12°36	16°14	25°11	13°43	17° 0	27°28	11°14	0° 0	10°37	10°31	23°59	25°37	F 11
S 12	1 23 34	18°59'37	13°25	13°45	17°29	25° 4	13°56	16°56	27°29	11°16	29°59	10°28	10°28	24° 6	25°43	S 12
S 13	1 27 31	19°58'51	25°16	14°52	18°44	24°57	14° 9	16°53	27°30	11°19	29°59	10°16	10°25	24°13	25°48	S 13
M14	1 31 27	20°58'07	7♂10	15°56	19°59	24°49	14°22	16°49	27°32	11°21	29°58	10° 2	10°22	24°20	25°54	M14
T 15	1 35 24	21°57'26	19° 9	16°59	21°14	24°40	14°35	16°46	27°33	11°23	29°57	9°48	10°18	24°26	25°59	T 15
W16	1 39 20	22°56'46	1♂13	17°58	22°29	24°30	14°48	16°43	27°34	11°25	29°56	9°34	10°15	24°33	26° 5	W16
T 17	1 43 17	23°56'08	13°24	18°55	23°44	24°19	15° 1	16°40	27°34	11°27	29°56	9°22	10°12	24°40	26°10	T 17
F 18	1 47 14	24°55'32	25°43	19°49	24°59	24° 8	15°14	16°36	27°35	11°29	29°55	9°13	10° 9	24°46	26°16	F 18
S 19	1 51 10	25°54'59	8♂11	20°40	26°14	23°55	15°27	16°33	27°36	11°31	29°54	9° 6	10° 6	24°53	26°21	S 19
S 20	1 55 7	26°54'27	20°51	21°27	27°29	23°42	15°40	16°30	27°37	11°34	29°54	9° 2	10° 3	25° 0	26°26	S 20
M21	1 59 3	27°53'57	3♂44	22°10	28°45	23°28	15°53	16°28	27°38	11°36	29°53	9°D 1	9°59	25° 7	26°31	M21
T 22	2 3 0	28°53'28	16°53	22°49	29°59	23°13	16° 6	16°25	27°38	11°38	29°53	9° 1	9°56	25°13	26°36	T 22
W23	2 6 56	29°53'01	0♂21	23°23	1♂15	22°58	16°18	16°22	27°39	11°40	29°52	9°R 1	9°53	25°20	26°41	W23
T 24	2 10 53	0♂52'36	14°11	23°52	2°30	22°42	16°31	16°19	27°39	11°42	29°52	9° 1	9°50	25°27	26°46	T 24
F 25	2 14 49	1°52'13	28°24	24°14	3°45	22°25	16°44	16°17	27°40	11°45	29°51	8°58	9°47	25°33	26°51	F 25
S 26	2 18 46	2°51'51	12♂57	24°31	5° 0	22° 8	16°57	16°15	27°40	11°47	29°51	8°53	9°43	25°40	26°55	S 26
S 27	2 22 43	3°51'31	27°48	24°40	6°15	21°50	17° 9	16°12	27°41	11°49	29°50	8°45	9°40	25°47	27° 0	S 27
M28	2 26 39	4°51'13	12♂49	24°R42	7°30	21°32	17°22	16°10	27°41	11°51	29°50	8°36	9°37	25°54	27° 5	M28
T 29	2 30 36	5°50'56	27°52	24°36	8°45	21°13	17°35	16° 8	27°41	11°54	29°49	8°26	9°34	26° 0	27° 9	T 29
W30	2 34 32	6°50'42	12♂46	24°21	10° 0	20°54	17°47	16° 6	27°42	11°56	29°49	8°17	9°31	26° 7	27°13	W30
T 31	2 38 29	7♂50'30	27♂23	23♂58	11♂15	20♂34	18♂0	16♂4	27♂42	11♂58	29°49	8♂9	9♂28	26♂14	27♂18	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	3s14	12n15	4n57	12s38	1s22	0s12	1n25	16n50	2s19	3s34	1n 5	6s55	2s13	21n 9	0n29	13s28
W 2	3 37	17 23	4 36	13 14	1 29	0 42	1 24	16 53	2 17	3 39	1 5	6 56	2 13	21 9	0 29	13 28
T 3	4 0	21 19	3 56	13 50	1 36	1 12	1 24	16 55	2 16	3 44	1 5	6 58	2 13	21 9	0 29	13 29
F 4	4 24	23 49	3 3	14 24	1 44	1 42	1 23	16 57	2 14	3 49	1 5	6 59	2 13	21 8	0 29	13 30
S 5	4 47	24 48	2 1	14 57	1 51	2 12	1 23	16 58	2 12	3 54	1 5	7 1	2 13	21 8	0 29	13 30
S 6	5 10	24 19	0 55	15 30	1 58	2 42	1 22	17 0	2 10	3 59	1 5	7 2	2 12	21 8	0 29	13 31
M 7	5 32	22 33	0s12	16 2	2 4	3 12	1 21	17 2	2 8	4 4	1 5	7 4	2 12	21 8	0 29	13 32
T 8	5 55	19 44	1 17	16 33	2 11	3 42	1 20	17 3	2 6	4 9	1 5	7 5	2 12	21 7	0 29	13 32
W 9	6 18	16 6	2 17	17 2	2 18	4 11	1 20	17 4	2 4	4 14	1 5	7 7	2 12	21 7	0 29	13 33
T 10	6 41	11 52	3 10	17 31	2 24	4 41	1 19	17 5	2 1	4 19	1 5	7 8	2 12	21 7	0 29	13 34
F 11	7 3	7 15	3 54	17 59	2 30	5 11	1 18	17 6	1 59	4 24	1 5	7 9	2 12	21 7	0 29	13 34
S 12	7 26	2 23	4 28	18 25	2 36	5 40	1 17	17 7	1 57	4 29	1 5	7 11	2 12	21 6	0 29	13 35
S 13	7 48	2s34	4 50	18 50	2 41	6 10	1 16	17 8	1 54	4 34	1 5	7 12	2 12	21 6	0 29	13 36
M14	8 10	7 25	4 59	19 14	2 46	6 39	1 15	17 8	1 52	4 39	1 5	7 13	2 12	21 6	0 29	13 36
T 15	8 32	12 3	4 56	19 37	2 51	7 8	1 13	17 8	1 49	4 44	1 5	7 14	2 12	21 6	0 29	13 37
W16	8 54	16 14	4 39	19 58	2 56	7 37	1 12	17 8	1 47	4 49	1 5	7 16	2 12	21 6	0 29	13 38
T 17	9 16	19 48	4 9	20 18	3 0	8 6	1 11	17 8	1 44	4 54	1 5	7 17	2 12	21 6	0 29	13 38
F 18	9 38	22 31	3 28	20 36	3 3	8 35	1 9	17 8	1 41	4 59	1 5	7 18	2 12	21 5	0 29	13 39
S 19	10 0	24 12	2 36	20 53	3 6	9 3	1 8	17 8	1 38	5 4	1 5	7 19	2 11	21 5	0 29	13 40
S 20	10 21	24 40	1 35	21 8	3 9	9 32	1 7	17 7	1 36	5 9	1 5	7 20	2 11	21 5	0 29	13 40
M21	10 43	23 49	0 28	21 21	3 10	10 0	1 5	17 7	1 33	5 14	1 6	7 21	2 11	21 5	0 29	13 41
T 22	11 4	21 39	0n42	21 32	3 12	10 28	1 3	17 6	1 30	5 19	1 6	7 22	2 11	21 5	0 29	13 42
W23	11 25	18 14	1 51	21 41	3 12	10 55	1 2	17 5	1 27	5 24	1 6	7 23	2 11	21 5	0 30	13 42
T 24	11 46	13 45	2 55	21 48	3 11	11 23	1 0	17 4	1 24	5 28	1 6	7 24	2 11	21 5	0 30	13 43
F 25	12 6	8 24	3 51	21 52	3 10	11 50	0 58	17 3	1 20	5 33	1 6	7 25	2 11	21 5	0 30	13 44
S 26	12 27	2 29	4 33	21 54	3 7	12 17	0 57	17 2	1 17	5 38	1 6	7 26	2 11	21 5	0 30	13 44
S 27	12 47	3n41	4 58	21 52	3 3	12 43	0 55	17 0	1 14	5 43	1 6	7 26	2 10	21 5	0 30	13 45
M28	13 7	9 42	5 2	21 48	2 58	13 9	0 53	16 59	1 11	5 48	1 6	7 27	2 10	21 5	0 30	13 46
T 29	13 27	15 9	4 46	21 40	2 52	13 35	0 51	16 57	1 7	5 52	1 6	7 28	2 10	21 5	0 30	13 46
W30	13 47	19 37	4 11	21 29	2 44	14 1	0 49	16 55	1 4	5 57	1 6	7 29	2 10	21 5	0 30	13 47
T 31	14 s 6	22n46	3n19	21s14	2s34	14s26	0n47	16n54	1s 1	6s 2	1n 6	7s29	2s10	21n 5	0n30	13s48

Julian Day Number = 2557373.5, Delta T = 279.59 sec
Ecliptic obliquity = 23°24'08, Nutation = 0°00'16, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 28°47'25, Lahiri = 27°54'25

ASTRODIENST EPHEMERIS for the year 2289

geocentric

NOVEMBER 2289

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	2 42 25	8♌50°19	11♏35	23°R25	12♌30	20°R14	18♏13	16°R 2	27♏42	12♌ 0	29°R48	8°R 4	9♏24	26♏20	27♏22	F 1
S 2	2 46 22	9°50'11	25°20	22♌43	13°46	19♏54	18°25	16♏ 0	27°42	12° 2	29°48	8♏ 1	9°21	26°27	27°26	S 2
S 3	2 50 18	10°50'05	8♏37	21°52	15° 1	19°34	18°38	15°58	27°R42	12° 5	29°48	8°D 0	9°18	26°34	27°30	S 3
M 4	2 54 15	11°50'01	21°28	20°53	16°16	19°13	18°50	15°57	27°42	12° 7	29°48	8° 1	9°15	26°41	27°34	M 4
T 5	2 58 12	12°49'59	3♏27	19°46	17°31	18°52	19° 3	15°55	27°42	12° 9	29°47	8° 2	9°12	26°47	27°38	T 5
W 6	3 2 8	13°49'59	16°10	18°34	18°46	18°31	19°15	15°54	27°42	12°11	29°47	8°R 2	9° 9	26°54	27°42	W 6
T 7	3 6 5	14°50'02	28°10	17°18	20° 1	18°10	19°27	15°53	27°41	12°14	29°47	8° 1	9° 5	27° 1	27°45	T 7
F 8	3 10 1	15°50'06	10♏ 3	15°59	21°17	17°49	19°40	15°51	27°41	12°16	29°47	7°58	9° 2	27° 8	27°49	F 8
S 9	3 13 58	16°50'13	21°53	14°42	22°32	17°28	19°52	15°50	27°41	12°18	29°47	7°52	8°59	27°14	27°53	S 9
S 10	3 17 54	17°50'21	3♏46	13°27	23°47	17° 7	20° 4	15°49	27°40	12°20	29°47	7°45	8°56	27°21	27°56	S 10
M 11	3 21 51	18°50'32	15°43	12°18	25° 2	16°46	20°16	15°48	27°40	12°23	29°47	7°36	8°53	27°28	27°59	M 11
T 12	3 25 47	19°50'44	27°48	11°16	26°17	16°25	20°29	15°48	27°40	12°25	29°47	7°27	8°49	27°34	28° 2	T 12
W 13	3 29 44	20°50'59	10♌ 2	10°24	27°33	16° 5	20°41	15°47	27°39	12°27	29°D47	7°17	8°46	27°41	28° 6	W 13
T 14	3 33 41	21°51'15	22°27	9°42	28°48	15°45	20°53	15°46	27°38	12°29	29°47	7° 9	8°43	27°48	28° 9	T 14
F 15	3 37 37	22°51'33	5♏ 2	9°12	0♏ 3	15°25	21° 5	15°46	27°38	12°32	29°47	7° 3	8°40	27°55	28°11	F 15
S 16	3 41 34	23°51'52	17°48	8°53	1°18	15° 6	21°17	15°46	27°37	12°34	29°47	6°59	8°37	28° 1	28°14	S 16
S 17	3 45 30	24°52'14	0♏45	8°D46	2°33	14°47	21°29	15°45	27°36	12°36	29°47	6°D57	8°34	28° 8	28°17	S 17
M 18	3 49 27	25°52'37	13°54	8°50	3°49	14°29	21°40	15°45	27°36	12°38	29°47	6°57	8°30	28°15	28°20	M 18
T 19	3 53 23	26°53'01	27°16	9° 5	5° 4	14°11	21°52	15°D45	27°35	12°40	29°47	6°58	8°27	28°21	28°22	T 19
W 20	3 57 20	27°53'26	10♏51	9°29	6°19	13°54	22° 4	15°45	27°34	12°43	29°47	7° 0	8°24	28°28	28°24	W 20
T 21	4 1 16	28°53'53	24°40	10° 3	7°34	13°37	22°15	15°45	27°33	12°45	29°48	7°R 1	8°21	28°35	28°27	T 21
F 22	4 5 13	29°54'21	8♏44	10°45	8°49	13°21	22°27	15°46	27°32	12°47	29°48	7° 1	8°18	28°42	28°29	F 22
S 23	4 9 10	0♏54°50	23° 1	11°33	10° 5	13° 6	22°39	15°46	27°31	12°49	29°48	6°59	8°15	28°48	28°31	S 23
S 24	4 13 6	1°55'20	7♏29	12°29	11°20	12°51	22°50	15°46	27°30	12°51	29°48	6°55	8°11	28°55	28°33	S 24
M 25	4 17 3	2°55'52	22° 4	13°29	12°35	12°37	23° 1	15°47	27°28	12°53	29°49	6°51	8° 8	29° 2	28°35	M 25
T 26	4 20 59	3°56'25	6♏39	14°35	13°50	12°24	23°13	15°48	27°27	12°56	29°49	6°45	8° 5	29° 8	28°37	T 26
W 27	4 24 56	4°56'59	21°10	15°44	15° 6	12°11	23°24	15°49	27°26	12°58	29°49	6°41	8° 2	29°15	28°38	W 27
T 28	4 28 52	5°57'35	5♏28	16°58	16°21	11°59	23°35	15°49	27°25	13° 0	29°50	6°37	7°59	29°22	28°40	T 28
F 29	4 32 49	6°58'12	19°28	18°14	17°36	11°49	23°46	15°50	27°23	13° 2	29°50	6°34	7°55	29°29	28°41	F 29
S 30	4 36 45	7♏58°51	3♏ 7	19♌33	18♏51	11♏38	23♏57	15♏52	27°22	13♌ 4	29°51	6°D33	7♏52	29♏35	28♏43	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	14s25	24n23	2n16	20s54	2s23	14s51	0n45	16n52	0s57	6s 7	1n 6	7s30	2s10	21n 5	0n30	13s48	1n41	21s25	10s36	23s 9	23s 4	3s 9	6n19	6s26	1n20
S 2	14 44	24 26	1 7	20 31	2 10	15 15	0 43	16 50	0 54	6 11	1 6	7 30	2 10	21 5	0 30	13 49	1 41	21 25	10 35	23 10	23 4	3 12	6 17	6 26	1n20
S 3	15 3	23 4	0s 3	20 4	1 56	15 39	0 41	16 47	0 50	6 16	1 6	7 31	2 10	21 5	0 30	13 50	1 41	21 24	10 35	23 10	23 5	3 15	6 16	6 27	1n20
M 4	15 22	20 31	1 12	19 33	1 39	16 3	0 39	16 45	0 47	6 21	1 6	7 31	2 9	21 5	0 30	13 51	1 41	21 24	10 35	23 10	23 5	3 17	6 14	6 27	1n20
T 5	15 40	17 3	2 15	18 58	1 21	16 26	0 37	16 43	0 43	6 25	1 6	7 32	2 9	21 5	0 30	13 51	1 41	21 24	10 35	23 10	23 5	3 20	6 12	6 28	1n20
W 6	15 58	12 57	3 10	18 19	1 2	16 49	0 35	16 41	0 40	6 30	1 6	7 32	2 9	21 5	0 30	13 52	1 41	21 24	10 35	23 10	23 5	3 23	6 10	6 28	1n20
T 7	16 16	8 24	3 56	17 39	0 42	17 12	0 33	16 38	0 36	6 35	1 6	7 33	2 9	21 5	0 30	13 53	1 41	21 24	10 34	23 10	23 5	3 26	6 8	6 29	1n20
F 8	16 33	3 36	4 31	16 57	0 22	17 34	0 30	16 36	0 33	6 39	1 7	7 33	2 9	21 5	0 30	13 53	1 41	21 24	10 34	23 10	23 6	3 29	6 7	6 29	1n20
S 9	16 50	1s18	4 55	16 14	0 1	17 55	0 28	16 33	0 29	6 44	1 7	7 33	2 9	21 5	0 30	13 54	1 41	21 24	10 34	23 10	23 6	3 32	6 5	6 30	1n20
S 10	17 7	6 10	5 6	15 33	0n19	18 16	0 26	16 31	0 25	6 48	1 7	7 33	2 8	21 5	0 30	13 55	1 41	21 23	10 34	23 11	23 6	3 34	6 3	6 31	1n20
M11	17 24	10 51	5 3	14 53	0 39	18 37	0 24	16 28	0 22	6 53	1 7	7 34	2 8	21 5	0 30	13 55	1 41	21 23	10 33	23 11	23 6	3 37	6 2	6 31	1n20
T 12	17 40	15 9	4 48	14 17	0 57	18 57	0 21	16 26	0 18	6 57	1 7	7 34	2 8	21 5	0 30	13 56	1 41	21 23	10 33	23 12	23 7	3 40	6 0	6 32	1n20
W13	17 56	18 53	4 19	13 45	1 14	19 16	0 19	16 23	0 15	7 2	1 7	7 34	2 8	21 6	0 30	13 57	1 41	21 23	10 33	23 12	23 7	3 43	5 58	6 32	1n20
T 14	18 12	21 51	3 37	13 17	1 29	19 35	0 17	16 21	0 11	7 6	1 7	7 34	2 8	21 6	0 30	13 57	1 41	21 23	10 33	23 13	23 7	3 46	5 57	6 33	1n20
F 15	18 27	23 47	2 44	12 55	1 42	19 54	0 14	16 18	0 8	7 11	1 7	7 34	2 8	21 6	0 30	13 58	1 41	21 22	10 33	23 13	23 7	3 49	5 55	6 33	1n20
S 16	18 43	24 32	1 42	12 38	1 54	20 12	0 12	16 16	0 5	7 15	1 7	7 34	2 7	21 6	0 30	13 59	1 41	21 22	10 32	23 13	23 7	3 51	5 54	6 34	1n20
S 17	18 57	23 58	0 34	12 27	2 3	20 29	0 9	16 14	0 1	7 19	1 7	7 34	2 7	21 6	0 30	13 59	1 41	21 22	10 32	23 13	23 8	3 54	5 52	6 35	1n20
M18	19 12	22 3	0n38	12 22	2 11	20 46	0 7	16 12	0n 2	7 24	1 7	7 34	2 7	21 6	0 30	14 0	1 41	21 22	10 32	23 13	23 8	3 57	5 51	6 35	1n20
T 19	19 26	18 54	1 48	12 21	2 16	21 2	0 5	16 9	0 5	7 28	1 7	7 34	2 7	21 7	0 30	14 1	1 41	21 21	10 32	23 13	23 8	4 0	5 50	6 36	1n20
W20	19 40	14 42	2 54	12 25	2 20	21 18	0 2	16 7	0 9	7 32	1 8	7 33	2 7	21 7	0 30	14 1	1 41	21 21	10 31	23 13	23 8	4 3	5 48	6 36	1n20
T 21	19 53	9 39	3 50	12 33	2 23	21 33	0s 0	16 5	0 12	7 36	1 8	7 33	2 7	21 7	0 31	14 2	1 41	21 21	10 31	23 13	23 8	4 5	5 47	6 37	1n20
F 22	20 6	4 3	4 34	12 45	2 24	21 47	0 3	16 4	0 15	7 41	1 8	7 33	2 6	21 7	0 31	14 2	1 41	21 21	10 31	23 13	23 9	4 8	5 46	6 38	1n20
S 23	20 19	1n51	5 2	13 0	2 24	22 1	0 5	16 2	0 18	7 45	1 8	7 33	2 6	21 8	0 31	14 3	1 41	21 20	10 31	23 13	23 9	4 11	5 44	6 38	1n20
S 24	20 31	7 44	5 11	13 17	2 23	22 14	0 8	16 0	0 21	7 49	1 8	7 32	2 6	21 8	0 31	14 4	1 41	21 20	10 31	23 13	23 9	4 14	5 43	6 39	1n20
M25	20 43	13 13	5 0	13 38	2 21	22 26	0 10	15 59	0 24	7 53	1 8	7 32	2 6	21 8	0 31	14 4	1 41	21 20	10 30	23 14	23 9	4 17	5 42	6 39	1n20
T 26	20 54	17 58	4 30	14 0	2 18	22 38	0 12	15 58	0 27	7 57	1 8	7 32	2 6	21 8	0 31	14 5	1 41	21 19	10 30	23 14	23 9	4 19	5 41	6 40	1n20
W27	21 5	21 36	3 43	14 23	2 14	22 49	0 15	15 57	0 30	8 1	1 8	7 31	2 6	21 9	0 31	14 6	1 41	21 19	10 30	23 14	23 10	4 22	5 39	6 41	1n20
T 28	21 16	23 50	2 42	14 48	2 10	22 59	0 17	15 56	0 33	8 5	1 8	7 31	2 5	21 9	0 31	14 6	1 41	21 19	10 30	23 14	23 10	4 25	5 38	6 41	1n20
F 29	21 26	24 31	1 32	15 14	2 5	23 9	0 20	15 55	0 35	8 9	1 9	7 30	2 5	21 9	0 31	14 7	1 41	21 18	10 29	23 14	23 10	4 28	5 37	6 42	1n20
S 30	21s36	23n41	0n19	15s41	1n59	23s18	0s22	15n54	0n38	8s13	1n 9	7s29	2s 5	21n 9	0n31	14s 7	1n41	21s18	10s29	23s14	23s10	4s31	5n36	6s42	1n20

ASTRODIENST EPHEMERIS for the year 2289

geocentric

DECEMBER 2289

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 40 42	8°59'31	16°23	20°54	20°57 6	11°R29	24°8	15°53	27°R21	13°6	29°51	6°33	7°49	29°42	28°44	S 1
M 2	4 44 39	10° 0'13	29°16	22°17	21°22	11°R20	24°19	15°54	27°R19	13° 8	29°52	6°34	7°46	29°49	28°45	M 2
T 3	4 48 35	11° 0'56	11°49	23°42	22°37	11°12	24°30	15°56	27°18	13°10	29°52	6°36	7°43	29°56	28°46	T 3
W 4	4 52 32	12° 1'40	24° 5	25° 8	23°52	11° 5	24°41	15°57	27°16	13°12	29°53	6°38	7°40	0° 2	28°47	W 4
T 5	4 56 28	13° 2'26	6°8	26°35	25° 7	10°59	24°51	15°59	27°14	13°14	29°53	6°39	7°36	0° 9	28°48	T 5
F 6	5 0 25	14° 3'13	18° 3	28° 3	26°22	10°54	25° 2	16° 0	27°13	13°16	29°54	6°R39	7°33	0°16	28°49	F 6
S 7	5 4 21	15° 4'02	29°55	29°32	27°38	10°49	25°12	16° 2	27°11	13°18	29°54	6°38	7°30	0°22	28°49	S 7
S 8	5 8 18	16° 4'52	11°49	1° 1	28°53	10°45	25°22	16° 4	27° 9	13°20	29°55	6°36	7°27	0°29	28°50	S 8
M 9	5 12 14	17° 5'44	23°48	2°31	0° 8	10°43	25°33	16° 6	27° 8	13°22	29°56	6°34	7°24	0°36	28°50	M 9
T 10	5 16 11	18° 6'37	5°15	4° 2	1°23	10°40	25°43	16° 8	27° 6	13°24	29°57	6°31	7°21	0°43	28°50	T 10
W 11	5 20 8	19° 7'31	18°19	5°33	2°39	10°39	25°53	16°11	27° 4	13°26	29°57	6°28	7°17	0°49	28°50	W 11
T 12	5 24 4	20° 8'27	0°55	7° 4	3°54	10°D39	26° 3	16°13	27° 2	13°28	29°58	6°25	7°14	0°56	28°R50	T 12
F 13	5 28 1	21° 9'23	13°47	8°36	5° 9	10°39	26°13	16°16	27° 0	13°30	29°59	6°23	7°11	1° 3	28°50	F 13
S 14	5 31 57	22°10'21	26°54	10° 8	6°24	10°40	26°23	16°18	26°58	13°32	29°59	6°22	7° 8	1°10	28°50	S 14
S 15	5 35 54	23°11'19	10°35	11°40	7°39	10°42	26°32	16°21	26°56	13°33	0° 0	6°D22	7° 5	1°16	28°50	S 15
M 16	5 39 50	24°12'19	23°50	13°12	8°55	10°45	26°42	16°24	26°54	13°35	0° 1	6°23	7° 1	1°23	28°49	M 16
T 17	5 43 47	25°13'18	7°36	14°44	10°10	10°48	26°51	16°26	26°52	13°37	0° 2	6°24	6°58	1°30	28°49	T 17
W 18	5 47 44	26°14'19	21°32	16°17	11°25	10°52	27° 1	16°29	26°50	13°39	0° 3	6°25	6°55	1°36	28°48	W 18
T 19	5 51 40	27°15'20	5°34	17°49	12°40	10°57	27°10	16°32	26°48	13°41	0° 4	6°25	6°52	1°43	28°47	T 19
F 20	5 55 37	28°16'21	19°42	19°22	13°55	11° 3	27°19	16°35	26°45	13°42	0° 5	6°26	6°49	1°50	28°47	F 20
S 21	5 59 33	29°17'23	3°54	20°55	15°11	11° 9	27°28	16°39	26°43	13°44	0° 6	6°R26	6°46	1°57	28°46	S 21
S 22	6 3 30	0°18'25	18° 6	22°28	16°26	11°16	27°37	16°42	26°41	13°46	0° 7	6°26	6°42	2° 3	28°45	S 22
M 23	6 7 26	1°19'28	2°17	24° 1	17°41	11°24	27°46	16°45	26°39	13°47	0° 8	6°25	6°39	2°10	28°43	M 23
T 24	6 11 23	2°20'31	16°23	25°35	18°56	11°33	27°55	16°49	26°37	13°49	0° 9	6°25	6°36	2°17	28°42	T 24
W 25	6 15 19	3°21'34	0°12	27° 8	20°11	11°42	28° 3	16°53	26°34	13°51	0°10	6°24	6°33	2°23	28°41	W 25
T 26	6 19 16	4°22'38	14°12	28°42	21°26	11°52	28°12	16°56	26°32	13°52	0°11	6°24	6°30	2°30	28°39	T 26
F 27	6 23 13	5°23'42	27°49	0°16	22°42	12° 2	28°20	17° 0	26°30	13°54	0°12	6°24	6°27	2°37	28°38	F 27
S 28	6 27 9	6°24'46	11°10	1°50	23°57	12°13	28°28	17° 4	26°27	13°55	0°13	6°24	6°23	2°44	28°36	S 28
S 29	6 31 6	7°25'51	24°14	3°24	25°12	12°25	28°36	17° 8	26°25	13°57	0°14	6°24	6°20	2°50	28°34	S 29
M 30	6 35 2	8°26'56	7°12	4°59	26°27	12°37	28°44	17°12	26°22	13°58	0°16	6°24	6°17	2°57	28°32	M 30
T 31	6 38 59	9°28'02	19°13	6°34	27°42	12°50	28°52	17°16	26°20	14°00	0°17	6°23	6°14	3° 4	28°130	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
S 1	21s46	21n31	0s54	16s 7	1n54	23s26	0s24	15n54	0n41	8s17	1n 9	7s29	2s 5	21n10	0n31	14s 8
M 2	21 55	18 17	2 2	16 35	1 48	23 34	0 27	15 54	0 43	8 21	1 9	7 28	2 5	21 10	0 31	14 9
T 3	22 4	14 18	3 2	17 2	1 41	23 41	0 29	15 54	0 46	8 24	1 9	7 27	2 5	21 10	0 31	14 9
W 4	22 12	9 49	3 52	17 29	1 35	23 47	0 32	15 54	0 48	8 28	1 9	7 27	2 4	21 11	0 31	14 10
T 5	22 20	5 2	4 31	17 56	1 28	23 53	0 34	15 54	0 51	8 32	1 9	7 26	2 4	21 11	0 31	14 10
F 6	22 27	0 8	4 58	18 23	1 21	23 57	0 36	15 55	0 53	8 36	1 9	7 25	2 4	21 11	0 31	14 11
S 7	22 34	4s45	5 13	18 49	1 14	24 1	0 39	15 55	0 55	8 39	1 10	7 24	2 4	21 12	0 31	14 11
S 8	22 41	9 28	5 13	19 15	1 6	24 5	0 41	15 56	0 57	8 43	1 10	7 23	2 4	21 12	0 31	14 12
M 9	22 47	13 53	5 1	19 40	0 59	24 7	0 43	15 57	0 59	8 47	1 10	7 22	2 4	21 13	0 31	14 13
T 10	22 52	17 48	4 34	20 4	0 52	24 9	0 45	15 59	1 1	8 50	1 10	7 21	2 3	21 13	0 31	14 13
W 11	22 57	21 1	3 55	20 28	0 45	24 10	0 47	16 0	1 3	8 54	1 10	7 20	2 3	21 13	0 31	14 14
T 12	23 2	23 18	3 3	20 51	0 37	24 10	0 50	16 2	1 5	8 57	1 10	7 19	2 3	21 14	0 31	14 14
F 13	23 6	24 26	2 2	21 13	0 30	24 10	0 52	16 4	1 7	9 1	1 10	7 18	2 3	21 14	0 31	14 15
S 14	23 10	24 14	0 52	21 34	0 23	24 9	0 54	16 6	1 9	9 4	1 11	7 17	2 3	21 14	0 31	14 15
S 15	23 14	22 39	0n22	21 54	0 15	24 7	0 56	16 8	1 11	9 7	1 11	7 16	2 3	21 15	0 31	14 16
M 16	23 17	19 44	1 35	22 13	0 8	24 4	0 58	16 10	1 13	9 11	1 11	7 14	2 2	21 15	0 31	14 16
T 17	23 19	15 41	2 44	22 31	0 1	24 1	0 10	16 13	1 14	9 14	1 11	7 13	2 2	21 16	0 31	14 17
W 18	23 21	10 45	3 45	22 48	0s 6	23 56	1 2	16 16	1 16	9 17	1 11	7 12	2 2	21 16	0 31	14 17
T 19	23 22	5 14	4 32	23 3	0 13	23 52	1 4	16 19	1 17	9 20	1 11	7 11	2 2	21 17	0 31	14 18
F 20	23 23	0n35	5 4	23 18	0 20	23 46	1 6	16 22	1 19	9 23	1 12	7 9	2 2	21 17	0 31	14 18
S 21	23 24	6 23	5 17	23 32	0 26	23 40	1 8	16 25	1 20	9 26	1 12	7 8	2 2	21 18	0 31	14 19
S 22	23 24	11 52	5 10	23 44	0 33	23 32	1 9	16 29	1 22	9 29	1 12	7 6	2 1	21 18	0 31	14 19
M 23	23 24	16 42	4 45	23 55	0 39	23 25	1 11	16 33	1 23	9 32	1 12	7 5	2 1	21 18	0 31	14 20
T 24	23 23	20 35	4 3	24 5	0 46	23 16	1 13	16 36	1 24	9 35	1 12	7 3	2 1	21 19	0 31	14 20
W 25	23 22	23 14	3 7	24 14	0 52	23 7	1 14	16 40	1 25	9 38	1 12	7 2	2 1	21 19	0 31	14 20
T 26	23 20	24 27	2 0	24 21	0 58	22 57	1 16	16 45	1 27	9 41	1 13	7 0	2 1	21 20	0 31	14 21
F 27	23 18	24 10	0 47	24 28	1 3	22 46	1 18	16 49	1 28	9 44	1 13	6 59	2 1	21 20	0 31	14 21
S 28	23 15	22 30	0s26	24 32	1 9	22 35	1 19	16 53	1 29	9 47	1 13	6 57	2 1	21 21	0 32	14 22
S 29	23 12	19 38	1 37	24 36	1 15	22 23	1 21	16 58	1 30	9 49	1 13	6 55	2 0	21 21	0 32	14 22
M 30	23 8	15 52	2 42	24 38	1 20	22 10	1 22	17 3	1 31	9 52	1 13	6 54	2 0	21 22	0 32	14 22
T 31	23s 4	11n30	3s37	24s39	1s25	21s57	1s23	17n 7	1n32	9s55	1n13	6s52	2s 0	21n22	0n32	14s23

Julian Day Number = 2557434.5, Delta T = 279.87 sec
 Ecliptic obliquity = 23°24'06, Nutation = 0°00'16, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 28°47'33, Lahiri = 27°54'34