



# Astrodienst Ephemeris Tables for the year 2129

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 2129

## geocentric

JANUARY 2129

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 42 51	10°33'34	19°8'59	29°R13	25°8'56	18°M45	8°H39	20°A58	27°R42	19°M52	0°R11	28°R43	0°M 3	22°B23	4°R18	S 1
S 2	6 46 48	11°34'42	2°II15	28°A24	26°44	19°23	8°49	21° 1	27°A41	19°53	0°II11	28°A35	29°A59	22°30	4°B17	S 2
M 3	6 50 44	12°35'49	14°22	27°45	27°32	20° 1	9° 0	21° 4	27°39	19°55	0°10	28°26	29°57	22°37	4°16	M 3
T 4	6 54 41	13°36'57	26°23	27°17	28°18	20°40	9°11	21° 7	27°38	19°56	0° 9	28°17	29°53	22°43	4°16	T 4
W 5	6 58 37	14°38'05	8°B18	26°59	29° 3	21°18	9°23	21°10	27°36	19°58	0° 8	28° 8	29°50	22°50	4°15	W 5
T 6	7 2 34	15°39'13	20° 9	26°D51	29°47	21°56	9°34	21°12	27°34	19°59	0° 7	28° 1	29°47	22°57	4°15	T 6
F 7	7 6 30	16°40'21	1°A58	26°52	0°H31	22°34	9°45	21°15	27°32	20° 1	0° 7	27°56	29°44	23° 3	4°14	F 7
S 8	7 10 27	17°41'29	13°47	27° 1	1°13	23°13	9°57	21°17	27°31	20° 2	0° 6	27°52	29°41	23°10	4°14	S 8
S 9	7 14 24	18°42'36	25°38	27°19	1°54	23°51	10° 8	21°20	27°29	20° 4	0° 5	27°D51	29°38	23°17	4°13	S 9
M10	7 18 20	19°43'44	7°M34	27°44	2°34	24°29	10°20	21°22	27°27	20° 5	0° 5	27°52	29°34	23°23	4°13	M10
T 11	7 22 17	20°44'52	19°39	28°15	3°12	25° 7	10°32	21°24	27°25	20° 6	0° 4	27°53	29°31	23°30	4°13	T 11
W12	7 26 13	21°46'00	1°A57	28°52	3°49	25°45	10°43	21°26	27°23	20° 8	0° 3	27°55	29°28	23°37	4°13	W12
T 13	7 30 10	22°47'08	14°32	29°35	4°25	26°24	10°55	21°28	27°21	20° 9	0° 3	27°56	29°25	23°43	4°13	T 13
F 14	7 34 6	23°48'15	27°29	0°B22	5° 0	27° 2	11° 7	21°30	27°19	20°10	0° 2	27°R56	29°22	23°50	4°D13	F 14
S 15	7 38 3	24°49'23	10°M51	1°13	5°33	27°40	11°19	21°31	27°17	20°11	0° 1	27°55	29°18	23°57	4°13	S 15
S 16	7 41 59	25°50'31	24°41	2° 9	6° 4	28°18	11°32	21°33	27°15	20°13	0° 1	27°53	29°15	24° 3	4°13	S 16
M17	7 45 56	26°51'39	8°A59	3° 7	6°34	28°57	11°44	21°34	27°13	20°14	0° 0	27°49	29°12	24°10	4°13	M17
T 18	7 49 53	27°52'46	23°43	4° 9	7° 2	29°35	11°56	21°36	27°11	20°15	29°B59	27°44	29° 9	24°17	4°13	T 18
W19	7 53 49	28°53'54	8°B47	5°14	7°29	0°A13	12° 9	21°37	27° 8	20°16	29°59	27°40	29° 6	24°23	4°14	W19
T 20	7 57 46	29°55'01	24° 1	6°21	7°54	0°51	12°21	21°38	27° 6	20°17	29°59	27°36	29° 3	24°30	4°14	T 20
F 21	8 1 42	0°56'07	9°A17	7°30	8°17	1°29	12°34	21°39	27° 4	20°18	29°58	27°34	28°59	24°37	4°14	F 21
S 22	8 5 39	1°57'13	24°23	8°41	8°38	2° 7	12°47	21°40	27° 2	20°19	29°58	27°D33	28°56	24°44	4°15	S 22
S 23	8 9 35	2°58'18	9°H10	9°54	8°57	2°46	12°59	21°41	26°59	20°20	29°57	27°33	28°53	24°50	4°15	S 23
M24	8 13 32	3°59'22	23°34	11° 9	9°14	3°24	13°12	21°42	26°57	20°21	29°57	27°34	28°50	24°57	4°16	M24
T 25	8 17 28	5° 0'25	7°Y31	12°25	9°29	4° 2	13°25	21°42	26°55	20°22	29°56	27°36	28°47	25° 4	4°17	T 25
W26	8 21 25	6° 1'27	21° 0	13°43	9°42	4°40	13°38	21°43	26°52	20°23	29°56	27°37	28°44	25°10	4°17	W26
T 27	8 25 22	7° 2'28	4°B 5	15° 2	9°53	5°18	13°51	21°43	26°50	20°24	29°56	27°R38	28°40	25°17	4°18	T 27
F 28	8 29 18	8° 3'28	16°47	16°22	10° 1	5°56	14° 4	21°44	26°47	20°24	29°55	27°38	28°37	25°24	4°19	F 28
S 29	8 33 15	9° 4'27	29°12	17°44	10° 7	6°34	14°17	21°44	26°45	20°25	29°55	27°37	28°34	25°30	4°20	S 29
S 30	8 37 11	10° 5'25	11°II22	19° 6	10°11	7°12	14°30	21°R44	26°42	20°26	29°55	27°35	28°31	25°37	4°21	S 30
M31	8 41 8	11°8'22	23°II22	20°B30	10°R12	7°A50	14°H44	21°A44	26°A40	20°M27	29°B54	27°A32	28°A28	25°B44	4°B22	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	23s 0	12n50	5s 4	20s18	3n 7	13s29	0s39	16s40	0n45	9s20	1s 5	5s56	2n25	12n58	0n46	16s 2
S 2	22 55	15 35	5 7	20 15	3 10	13 6	0 32	16 51	0 44	9 16	1 5	5 57	2 25	12 59	0 46	16 3
M 3	22 49	17 36	4 56	20 14	3 10	12 42	0 24	17 2	0 44	9 12	1 5	5 58	2 26	13 0	0 46	16 3
T 4	22 43	18 50	4 32	20 15	3 9	12 19	0 16	17 13	0 43	9 7	1 5	5 59	2 26	13 0	0 46	16 3
W 5	22 37	19 14	3 56	20 17	3 6	11 55	0 8	17 23	0 43	9 3	1 5	6 0	2 26	13 1	0 46	16 4
T 6	22 30	18 46	3 10	20 22	3 1	11 32	0n 0	17 33	0 42	8 59	1 5	6 0	2 26	13 1	0 46	16 4
F 7	22 23	17 30	2 16	20 27	2 56	11 8	0 9	17 44	0 42	8 54	1 5	6 1	2 27	13 2	0 46	16 4
S 8	22 15	15 28	1 16	20 34	2 49	10 45	0 18	17 54	0 41	8 50	1 5	6 2	2 27	13 3	0 46	16 5
S 9	22 7	12 47	0 12	20 42	2 42	10 22	0 27	18 4	0 41	8 45	1 5	6 2	2 27	13 3	0 46	16 5
M10	21 58	9 32	0n53	20 50	2 34	9 59	0 37	18 14	0 40	8 41	1 4	6 3	2 27	13 4	0 46	16 5
T 11	21 49	5 53	1 56	20 59	2 25	9 36	0 47	18 23	0 40	8 36	1 4	6 3	2 28	13 5	0 46	16 6
W12	21 40	1 55	2 55	21 9	2 16	9 13	0 57	18 33	0 39	8 32	1 4	6 4	2 28	13 5	0 46	16 6
T 13	21 30	2s13	3 48	21 18	2 7	8 51	1 7	18 42	0 39	8 27	1 4	6 4	2 28	13 6	0 46	16 6
F 14	21 20	6 22	4 30	21 27	1 58	8 28	1 17	18 52	0 38	8 23	1 4	6 5	2 29	13 7	0 46	16 7
S 15	21 9	10 19	4 59	21 36	1 48	8 6	1 28	19 1	0 38	8 18	1 4	6 5	2 29	13 8	0 46	16 7
S 16	20 58	13 52	5 13	21 45	1 39	7 44	1 39	19 10	0 37	8 13	1 4	6 5	2 29	13 8	0 46	16 7
M17	20 46	16 43	5 7	21 54	1 29	7 23	1 51	19 19	0 36	8 8	1 4	6 6	2 29	13 9	0 46	16 7
T 18	20 34	18 35	4 42	22 2	1 20	7 2	2 2	19 28	0 36	8 4	1 4	6 6	2 30	13 10	0 46	16 8
W19	20 22	19 12	3 56	22 9	1 10	6 41	2 14	19 36	0 35	7 59	1 4	6 6	2 30	13 11	0 46	16 8
T 20	20 9	18 26	2 54	22 15	1 1	6 21	2 26	19 45	0 35	7 54	1 4	6 6	2 30	13 11	0 46	16 8
F 21	19 56	16 20	1 39	22 21	0 52	6 1	2 38	19 53	0 34	7 49	1 3	6 6	2 30	13 12	0 46	16 8
S 22	19 43	13 7	0 17	22 26	0 42	5 41	2 51	20 1	0 34	7 44	1 3	6 6	2 31	13 13	0 46	16 8
S 23	19 29	9 6	1s 4	22 30	0 33	5 22	3 4	20 9	0 33	7 39	1 3	6 7	2 31	13 14	0 46	16 9
M24	19 15	4 40	2 19	22 33	0 24	5 4	3 16	20 17	0 32	7 34	1 3	6 7	2 31	13 15	0 46	16 9
T 25	19 0	0 8	3 23	22 35	0 16	4 46	3 30	20 25	0 32	7 29	1 3	6 7	2 32	13 15	0 46	16 9
W26	18 45	4n16	4 14	22 36	0 7	4 29	3 43	20 33	0 31	7 24	1 3	6 6	2 32	13 16	0 46	16 9
T 27	18 30	8 19	4 50	22 36	0s 1	4 12	3 56	20 40	0 30	7 19	1 3	6 6	2 32	13 17	0 46	16 9
F 28	18 14	11 53	5 10	22 34	0 10	3 57	4 10	20 47	0 30	7 14	1 3	6 6	2 32	13 18	0 46	16 10
S 29	17 58	14 49	5 16	22 32	0 17	3 42	4 24	20 55	0 29	7 9	1 3	6 6	2 33	13 19	0 46	16 10
S 30	17 42	17 4	5 7	22 29	0 25	3 27	4 38	21 2	0 29	7 4	1 3	6 6	2 33	13 20	0 46	16 10
M31	17s26	18n31	4s45	22s24	0s33	3s14	4n52	21s 8	0n28	6s58	1s 3	6s 5	2n33	13n21	0n46	16s10

Julian Day Number = 2498661.5, Delta T = 108.37 sec  
 Ecliptic obliquity = 23°25'12, Nutation = -0°00'08, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°32'34, Lahiri = 25°39'34

# ASTRODIENST EPHEMERIS for the year 2129

## geocentric

FEBRUARY 2129

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 45 4	12° 7'17"	5° 16'	21° 55'	10° 11'	8° 28'	14° 57'	21° 44'	26° 37'	20° 27'	29° 54'	27° 29'	28° 24'	25° 50'	4° 23'	T 1
W 2	8 49 1	13° 8'12"	17° 6'	23° 20'	10° 7'	9° 6'	15° 10'	21° 44'	26° 35'	20° 28'	29° 54'	27° 27'	28° 21'	25° 57'	4° 24'	W 2
T 3	8 52 57	14° 9'05"	28° 55'	24° 47'	10° 0'	9° 44'	15° 24'	21° 43'	26° 32'	20° 29'	29° 54'	27° 25'	28° 18'	26° 4'	4° 25'	T 3
F 4	8 56 54	15° 9'57"	10° 45'	26° 14'	9° 51'	10° 22'	15° 37'	21° 43'	26° 30'	20° 29'	29° 54'	27° 24'	28° 15'	26° 10'	4° 26'	F 4
S 5	9 0 51	16° 10'49"	22° 38'	27° 42'	9° 40'	11° 0'	15° 51'	21° 42'	26° 27'	20° 30'	29° 53'	27° 23'	28° 12'	26° 17'	4° 27'	S 5
S 6	9 4 47	17° 11'39"	4° 37'	29° 11'	9° 26'	11° 38'	16° 5'	21° 42'	26° 25'	20° 30'	29° 53'	27° 23'	28° 9'	26° 24'	4° 29'	S 6
M 7	9 8 44	18° 12'28"	16° 43'	0° 41'	9° 10'	12° 16'	16° 18'	21° 41'	26° 22'	20° 31'	29° 53'	27° 24'	28° 5'	26° 30'	4° 30'	M 7
T 8	9 12 40	19° 13'16"	28° 58'	2° 11'	8° 51'	12° 54'	16° 32'	21° 40'	26° 19'	20° 31'	29° 53'	27° 25'	28° 2'	26° 37'	4° 32'	T 8
W 9	9 16 37	20° 14'03"	11° 25'	3° 43'	8° 30'	13° 32'	16° 46'	21° 39'	26° 17'	20° 31'	29° 53'	27° 25'	27° 59'	26° 44'	4° 33'	W 9
T 10	9 20 33	21° 14'48"	24° 7'	5° 15'	8° 6'	14° 10'	16° 59'	21° 38'	26° 14'	20° 32'	29° 53'	27° 26'	27° 56'	26° 50'	4° 35'	T 10
F 11	9 24 30	22° 15'33"	7° 6'	6° 48'	7° 41'	14° 48'	17° 13'	21° 37'	26° 12'	20° 32'	29° 53'	27° 27'	27° 53'	26° 57'	4° 36'	F 11
S 12	9 28 26	23° 16'17"	20° 24'	8° 22'	7° 13'	15° 26'	17° 27'	21° 35'	26° 9'	20° 32'	29° 53'	27° 27'	27° 50'	27° 4'	4° 38'	S 12
S 13	9 32 23	24° 17'00"	4° 5'	9° 57'	6° 43'	16° 4'	17° 41'	21° 34'	26° 6'	20° 33'	29° 53'	27° 27'	27° 46'	27° 10'	4° 40'	S 13
M14	9 36 20	25° 17'43"	18° 8'	11° 32'	6° 12'	16° 42'	17° 55'	21° 32'	26° 4'	20° 33'	29° 53'	27° 27'	27° 43'	27° 17'	4° 41'	M14
T 15	9 40 16	26° 18'24"	2° 32'	13° 8'	5° 39'	17° 20'	18° 9'	21° 31'	26° 1'	20° 33'	29° 53'	27° 26'	27° 40'	27° 24'	4° 43'	T 15
W16	9 44 13	27° 19'03"	17° 16'	14° 45'	5° 5'	17° 58'	18° 23'	21° 29'	25° 58'	20° 33'	29° 53'	27° 26'	27° 37'	27° 30'	4° 45'	W16
T 17	9 48 9	28° 19'42"	2° 12'	16° 23'	4° 30'	18° 35'	18° 37'	21° 27'	25° 56'	20° 34'	29° 53'	27° 26'	27° 34'	27° 37'	4° 47'	T 17
F 18	9 52 6	29° 20'20"	17° 14'	18° 2'	3° 54'	19° 13'	18° 51'	21° 26'	25° 53'	20° 34'	29° 53'	27° 26'	27° 30'	27° 44'	4° 49'	F 18
S 19	9 56 2	0° 20'55"	2° 14'	19° 42'	3° 17'	19° 51'	19° 6'	21° 24'	25° 51'	20° 34'	29° 53'	27° 26'	27° 27'	27° 50'	4° 51'	S 19
S 20	9 59 59	1° 21'30"	17° 2'	21° 23'	2° 40'	20° 29'	19° 20'	21° 21'	25° 48'	20° 34'	29° 53'	27° 26'	27° 24'	27° 57'	4° 53'	S 20
M21	10 3 55	2° 22'03"	1° 32'	23° 4'	2° 2'	21° 6'	19° 34'	21° 19'	25° 45'	20° 34'	29° 54'	27° 26'	27° 21'	28° 3'	4° 55'	M21
T 22	10 7 52	3° 22'34"	15° 38'	24° 47'	1° 25'	21° 44'	19° 48'	21° 17'	25° 43'	20° 34'	29° 54'	27° 25'	27° 18'	28° 10'	4° 57'	T 22
W23	10 11 48	4° 23'03"	29° 18'	26° 30'	0° 48'	22° 22'	20° 2'	21° 15'	25° 40'	20° 34'	29° 54'	27° 24'	27° 15'	28° 17'	5° 0'	W23
T 24	10 15 45	5° 23'30"	12° 31'	28° 14'	0° 12'	22° 59'	20° 17'	21° 12'	25° 38'	20° 33'	29° 54'	27° 24'	27° 11'	28° 23'	5° 2'	T 24
F 25	10 19 42	6° 23'56"	25° 20'	29° 59'	29° 36'	23° 37'	20° 31'	21° 10'	25° 35'	20° 33'	29° 54'	27° 23'	27° 8'	28° 30'	5° 4'	F 25
S 26	10 23 38	7° 24'20"	7° 48'	1° 46'	29° 2'	24° 15'	20° 45'	21° 7'	25° 32'	20° 33'	29° 55'	27° 23'	27° 5'	28° 37'	5° 7'	S 26
S 27	10 27 35	8° 24'41"	19° 59'	3° 33'	28° 29'	24° 52'	21° 0'	21° 4'	25° 30'	20° 33'	29° 55'	27° 23'	27° 2'	28° 43'	5° 9'	S 27
M28	10 31 31	9° 25'01"	1° 58'	5° 21'	27° 57'	25° 30'	21° 14'	21° 1'	25° 27'	20° 33'	29° 55'	27° 24'	26° 59'	28° 50'	5° 11'	M28

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	17s 9	19n 9	4s10	22s18	0s40	3s 2	5n 6	21s15	0n27	6s53	1s 3	6s 5	2n34	13n21	0n46	16s10
W 2	16 52	18 56	3 25	22 11	0 47	2 50	5 20	21 22	0 26	6 48	1 3	6 5	2 34	13 22	0 46	16 10
T 3	16 34	17 53	2 31	22 2	0 54	2 39	5 34	21 28	0 26	6 43	1 3	6 4	2 34	13 23	0 46	16 10
F 4	16 16	16 4	1 31	21 53	1 0	2 30	5 47	21 34	0 25	6 37	1 3	6 4	2 34	13 24	0 46	16 10
S 5	15 58	13 33	0 26	21 42	1 7	2 21	6 1	21 40	0 24	6 32	1 2	6 4	2 35	13 25	0 46	16 10
S 6	15 40	10 26	0n40	21 29	1 13	2 14	6 15	21 46	0 24	6 27	1 2	6 3	2 35	13 26	0 46	16 11
M 7	15 22	6 52	1 45	21 16	1 18	2 8	6 28	21 52	0 23	6 22	1 2	6 3	2 35	13 27	0 46	16 11
T 8	15 3	2 58	2 47	21 1	1 24	2 2	6 41	21 58	0 22	6 16	1 2	6 2	2 35	13 28	0 46	16 11
W 9	14 44	1s 7	3 41	20 45	1 29	1 59	6 54	22 3	0 21	6 11	1 2	6 1	2 36	13 29	0 46	16 11
T 10	14 24	5 13	4 26	20 28	1 34	1 56	7 6	22 8	0 21	6 5	1 2	6 1	2 36	13 29	0 46	16 11
F 11	14 5	9 10	4 58	20 9	1 39	1 54	7 18	22 14	0 20	6 0	1 2	6 0	2 36	13 30	0 47	16 11
S 12	13 45	12 46	5 16	19 49	1 43	1 54	7 29	22 18	0 19	5 54	1 2	5 59	2 37	13 31	0 47	16 11
S 13	13 25	15 46	5 16	19 28	1 47	1 55	7 40	22 23	0 18	5 49	1 2	5 59	2 37	13 32	0 47	16 11
M14	13 5	17 57	4 58	19 5	1 51	1 57	7 50	22 28	0 18	5 44	1 2	5 58	2 37	13 33	0 47	16 11
T 15	12 44	19 3	4 20	18 41	1 54	2 0	7 59	22 32	0 17	5 38	1 2	5 57	2 37	13 34	0 47	16 11
W16	12 24	18 55	3 25	18 15	1 57	2 4	8 8	22 37	0 16	5 32	1 2	5 56	2 38	13 35	0 47	16 11
T 17	12 3	17 27	2 16	17 49	1 59	2 9	8 15	22 41	0 15	5 27	1 2	5 55	2 38	13 36	0 47	16 11
F 18	11 42	14 46	0 56	17 21	2 2	2 16	8 22	22 45	0 14	5 21	1 2	5 54	2 38	13 37	0 47	16 11
S 19	11 20	11 5	0s27	16 51	2 4	2 23	8 28	22 49	0 13	5 16	1 2	5 53	2 38	13 38	0 47	16 11
S 20	10 59	6 45	1 47	16 20	2 5	2 32	8 33	22 52	0 13	5 10	1 2	5 52	2 39	13 38	0 47	16 11
M21	10 37	2 7	2 58	15 48	2 6	2 41	8 37	22 56	0 12	5 5	1 2	5 51	2 39	13 39	0 47	16 11
T 22	10 16	2n30	3 57	15 15	2 7	2 51	8 40	22 59	0 11	4 59	1 2	5 50	2 39	13 40	0 47	16 11
W23	9 54	6 50	4 40	14 40	2 7	3 2	8 42	23 2	0 10	4 53	1 2	5 49	2 39	13 41	0 47	16 10
T 24	9 32	10 42	5 7	14 4	2 7	3 13	8 43	23 5	0 9	4 48	1 2	5 48	2 40	13 42	0 47	16 10
F 25	9 9	13 56	5 17	13 26	2 7	3 25	8 43	23 8	0 8	4 42	1 2	5 47	2 40	13 43	0 47	16 10
S 26	8 47	16 27	5 12	12 48	2 6	3 38	8 42	23 11	0 7	4 37	1 2	5 46	2 40	13 44	0 47	16 10
S 27	8 25	18 10	4 53	12 7	2 4	3 51	8 41	23 13	0 6	4 31	1 2	5 44	2 40	13 44	0 47	16 10
M28	8s 2	19n 3	4s22	11s26	2s 2	4s 4	8n38	23s15	0n 5	4s25	1s 2	5s43	2n40	13n45	0n47	16s10

Julian Day Number = 2498692.5, Delta T = 108.42 sec

Ecliptic obliquity = 23°25'13", Nutation = - 0°00'08", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 26°32'38", Lahiri = 25°39'39"

ASTRODIENST EPHEMERIS for the year 2129  
geocentric

MARCH 2129

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	10 35 28	10 <sup>h</sup> 25'19	13 <sup>h</sup> 49	7 <sup>h</sup> 10	27°R27	26 <sup>h</sup> 7	21 <sup>h</sup> 29	20°R59	25°R25	20°R32	29 <sup>h</sup> 56	27 <sup>h</sup> 25	26 <sup>h</sup> 56	28 <sup>h</sup> 57	5 <sup>h</sup> 14	T 1
W 2	10 39 24	11°25'35	25°37	9° 1	26 <sup>h</sup> 59	26°45	21°43	20 <sup>h</sup> 56	25 <sup>h</sup> 22	20 <sup>h</sup> 32	29°56	27°26	26°52	29° 3	5°16	W 2
T 3	10 43 21	12°25'49	7 <sup>h</sup> 26	10°52	26°33	27°22	21°57	20°53	25°20	20°32	29°57	27°28	26°49	29°10	5°19	T 3
F 4	10 47 17	13°26'01	19°19	12°44	26° 9	28° 0	22°12	20°49	25°17	20°31	29°57	27°29	26°46	29°17	5°22	F 4
S 5	10 51 14	14°26'11	1 <sup>h</sup> 19	14°37	25°47	28°37	22°26	20°46	25°15	20°31	29°57	27°R29	26°43	29°23	5°24	S 5
S 6	10 55 11	15°26'20	13°29	16°31	25°27	29°14	22°41	20°43	25°12	20°31	29°58	27°28	26°40	29°30	5°27	S 6
M 7	10 59 7	16°26'26	25°49	18°25	25°10	29°52	22°55	20°39	25°10	20°30	29°58	27°26	26°36	29°37	5°30	M 7
T 8	11 3 4	17°26'31	8 <sup>h</sup> 21	20°21	24°56	0 <sup>h</sup> 29	23°10	20°36	25° 8	20°30	29°59	27°24	26°33	29°43	5°33	T 8
W 9	11 7 0	18°26'34	21° 7	22°17	24°43	1° 6	23°24	20°33	25° 5	20°29	29°59	27°20	26°30	29°50	5°35	W 9
T 10	11 10 57	19°26'35	4 <sup>h</sup> 16	24°13	24°34	1°43	23°39	20°29	25° 3	20°29	29°59	27°17	26°27	29°57	5°38	T 10
F 11	11 14 53	20°26'35	17°18	26°10	24°27	2°21	23°53	20°25	25° 1	20°28	0 <sup>h</sup> 11	27°14	26°24	0 <sup>h</sup> 3	5°41	F 11
S 12	11 18 50	21°26'33	0 <sup>h</sup> 24	28° 8	24°22	2°58	24° 8	20°22	24°58	20°27	0° 1	27°11	26°21	0°10	5°44	S 12
S 13	11 22 46	22°26'29	14°26	0 <sup>h</sup> 5	24°D20	3°35	24°23	20°18	24°56	20°27	0° 2	27°10	26°17	0°17	5°47	S 13
M14	11 26 43	23°26'24	28°21	2° 2	24°20	4°12	24°37	20°14	24°54	20°26	0° 2	27°D10	26°14	0°23	5°50	M14
T 15	11 30 40	24°26'17	12 <sup>h</sup> 30	3°59	24°22	4°49	24°52	20°10	24°52	20°25	0° 3	27°11	26°11	0°30	5°53	T 15
W16	11 34 36	25°26'09	26°52	5°55	24°27	5°26	25° 6	20° 6	24°49	20°25	0° 3	27°12	26° 8	0°37	5°56	W16
T 17	11 38 33	26°25'59	11 <sup>h</sup> 23	7°50	24°34	6° 3	25°21	20° 2	24°47	20°24	0° 4	27°14	26° 5	0°43	5°59	T 17
F 18	11 42 29	27°25'47	26° 0	9°44	24°44	6°40	25°35	19°58	24°45	20°23	0° 5	27°R14	26° 1	0°50	6° 2	F 18
S 19	11 46 26	28°25'33	10 <sup>h</sup> 37	11°36	24°56	7°17	25°50	19°54	24°43	20°22	0° 6	27°14	25°58	0°57	6° 6	S 19
S 20	11 50 22	29°25'18	25° 8	13°25	25° 9	7°54	26° 4	19°50	24°41	20°21	0° 6	27°12	25°55	1° 3	6° 9	S 20
M21	11 54 19	0 <sup>h</sup> 25'00	9 <sup>h</sup> 28	15°12	25°25	8°31	26°19	19°45	24°39	20°20	0° 7	27° 8	25°52	1°10	6°12	M21
T 22	11 58 15	1°24'41	23°29	16°56	25°43	9° 8	26°33	19°41	24°37	20°19	0° 8	27° 3	25°49	1°17	6°15	T 22
W23	12 2 12	2°24'19	7 <sup>h</sup> 10	18°36	26° 2	9°44	26°48	19°37	24°35	20°19	0° 9	26°57	25°46	1°23	6°19	W23
T 24	12 6 8	3°23'55	20°26	20°13	26°24	10°21	27° 2	19°33	24°33	20°18	0° 9	26°51	25°42	1°30	6°22	T 24
F 25	12 10 5	4°23'29	3 <sup>h</sup> 19	21°44	26°47	10°57	27°17	19°28	24°32	20°17	0°10	26°46	25°39	1°37	6°25	F 25
S 26	12 14 2	5°23'01	15°51	23°11	27°12	11°34	27°31	19°24	24°30	20°16	0°11	26°42	25°36	1°43	6°29	S 26
S 27	12 17 58	6°22'30	28° 4	24°32	27°39	12°11	27°46	19°19	24°28	20°15	0°12	26°40	25°33	1°50	6°32	S 27
M28	12 21 55	7°21'58	10 <sup>h</sup> 35	25°48	28° 7	12°47	28° 0	19°15	24°26	20°13	0°13	26°D40	25°30	1°57	6°35	M28
T 29	12 25 51	8°21'23	21°56	26°58	28°37	13°23	28°15	19°10	24°25	20°12	0°14	26°41	25°27	2° 3	6°39	T 29
W30	12 29 48	9°20'45	3 <sup>h</sup> 24	28° 1	29° 8	14° 0	28°29	19° 6	24°23	20°11	0°15	26°42	25°23	2°10	6°42	W30
T 31	12 33 44	10 <sup>h</sup> 20'05	15 <sup>h</sup> 34	28 <sup>h</sup> 57	29 <sup>h</sup> 41	14 <sup>h</sup> 36	28 <sup>h</sup> 44	19 <sup>h</sup> 1	24 <sup>h</sup> 21	20 <sup>h</sup> 10	0 <sup>h</sup> 15	26 <sup>h</sup> 44	25 <sup>h</sup> 20	2 <sup>h</sup> 17	6 <sup>h</sup> 46	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	decl	decl	lat	
T 1	7s39	19n 4	3s39	10s43	2s 0	4s17	8n34	23s18	0n 4	4s19	1s 2	5s42	2n41	13n46	0n47	16s10	1n46	6n59	13s25	12n22	12n32	17n59	12n27	0s52		
W 2	7 16	18 15	2 48	9 59	1 57	4 30	8 30	23 20	0 3	4 14	1 2	5 41	2 41	13 47	0 46	16 10	1 46	7 0	13 25	12 21	12 33	17 59	12 28	0 52		
T 3	6 53	16 39	1 49	9 14	1 53	4 44	8 25	23 21	0 2	4 8	1 2	5 39	2 41	13 48	0 46	16 10	1 46	7 0	13 24	12 21	12 34	17 58	12 28	0 52		
F 4	6 30	14 18	0 45	8 28	1 49	4 57	8 19	23 23	0 1	4 2	1 2	5 38	2 41	13 49	0 46	16 9	1 46	7 0	13 24	12 20	12 35	17 57	12 29	0 52		
S 5	6 7	11 20	0n21	7 40	1 45	5 11	8 13	23 25	0 0	3 57	1 2	5 36	2 41	13 49	0 46	16 9	1 46	7 1	13 24	12 20	12 36	17 57	12 30	0 52		
S 6	5 44	7 50	1 27	6 51	1 40	5 24	8 5	23 26	0s 1	3 51	1 2	5 35	2 42	13 50	0 46	16 9	1 46	7 1	13 24	12 21	12 37	17 56	12 31	0 52		
M 7	5 21	3 58	2 30	6 1	1 34	5 36	7 58	23 27	0 2	3 45	1 2	5 34	2 42	13 51	0 46	16 9	1 47	7 2	13 23	12 21	12 38	17 56	12 32	0 52		
T 8	4 57	0s 8	3 27	5 10	1 28	5 49	7 49	23 28	0 3	3 40	1 2	5 32	2 42	13 52	0 46	16 9	1 47	7 2	13 23	12 22	12 39	17 55	12 33	0 52		
W 9	4 34	4 18	4 14	4 18	1 21	6 1	7 41	23 29	0 4	3 34	1 2	5 31	2 42	13 53	0 46	16 9	1 47	7 2	13 23	12 23	12 40	17 54	12 34	0 52		
T 10	4 11	8 20	4 50	3 35	1 14	6 13	7 32	23 30	0 5	3 28	1 2	5 29	2 42	13 53	0 46	16 8	1 47	7 3	13 22	12 24	12 41	17 54	12 34	0 52		
F 11	3 47	12 1	5 10	2 32	1 6	6 24	7 22	23 30	0 6	3 22	1 2	5 28	2 43	13 54	0 46	16 8	1 47	7 3	13 22	12 25	12 42	17 53	12 35	0 52		
S 12	3 23	15 10	5 14	1 37	0 57	6 35	7 13	23 31	0 7	3 17	1 2	5 26	2 43	13 55	0 46	16 8	1 47	7 4	13 22	12 26	12 44	17 53	12 36	0 52		
S 13	3 0	17 32	5 1	0 42	0 48	6 45	7 3	23 31	0 8	3 11	1 2	5 25	2 43	13 56	0 46	16 8	1 47	7 4	13 21	12 27	12 45	17 52	12 37	0 52		
M14	2 36	18 55	4 29	0n13	0 39	6 55	6 52	23 31	0 10	3 5	1 2	5 23	2 43	13 56	0 46	16 7	1 47	7 4	13 21	12 27	12 46	17 51	12 38	0 52		
T 15	2 12	19 9	3 42	1 9	0 29	7 4	6 42	23 31	0 11	2 59	1 2	5 21	2 43	13 57	0 46	16 7	1 47	7 5	13 21	12 26	12 47	17 51	12 39	0 52		
W16	1 49	18 10	2 39	2 5	0 18	7 12	6 31	23 30	0 12	2 54	1 2	5 20	2 43	13 58	0 46	16 7	1 47	7 5	13 21	12 26	12 48	17 50	12 40	0 52		
T 17	1 25	15 58	1 26	3 0	0 7	7 20	6 20	23 30	0 13	2 48	1 2	5 18	2 43	13 59	0 46	16 7	1 47	7 6	13 20	12 25	12 49	17 49	12 41	0 52		
F 18	1 1	12 44	0 7	3 55	0n 5	7 27	6 10	23 29	0 14	2 42	1 2	5 16	2 44	13 59	0 46	16 6	1 47	7 6	13 20	12 25	12 50	17 49	12 42	0 52		
S 19	0 38	8 42	1s13	4 50	0 17	7 34	5 59	23 29	0 16	2 36	1 2	5 15	2 44	14 0	0 46	16 6	1 47	7 6	13 20	12 25	12 51	17 48	12 43	0 52		
S 20	0 14	4 11	2 27	5 44	0 29	7 40	5 48	23 28	0 17	2 31	1 2	5 13	2 44	14 1	0 46	16 6	1 47	7 7	13 20	12 26	12 52	17 47	12 44	0 52		
M21	0n10	0n31	3 31	6 37	0 41	7 45	5 37	23 27	0 18	2 25	1 2	5 11	2 44	14 1	0 46	16 6	1 47	7 7	13 19	12 28	12 53	17 47	12 45	0 52		
T 22	0 34	5 5	4 20	7 28	0 54	7 49	5 26	23 26	0 19	2 19	1 2	5 10	2 44	14 2	0 46	16 5	1 47	7 8	13 19	12 29	12 54	17 46	12 46	0 52		
W23	0 57	9 16	4 53	8 18	1 6	7 53	5 15	23 24	0 21	2 13	1 2	5 8	2 44	14 2	0 46	16 5	1 47	7 8	13 19	12 31	12 55	17 45	12 47	0 52		
T 24	1 21	12 52	5 10	9 6	1 19	7 56	5 4	23 23	0 22	2 8	1 2	5 6	2 44	14 3	0 46	16 5	1 47	7 8	13 18	12 33	12 56	17 45	12 48	0 53		
F 25	1 45	15 44	5 9	9 52	1 31	7 59	4 53	23 21	0 23	2 2	1 2	5 4	2 44	14 4	0 46	16 4	1 47	7 9	13 18	12 35	12 58	17 44	12 49	0 53		
S 26	2 8	17 47	4 54	10 36	1 43	8 0	4 42	23 19	0 25	1 56	1 2	5 3	2 45	14 4	0 46	16 4	1 47	7 9	13 18	12 36	12 59	17 44	12 50	0 53		
S 27	2 32	18 58	4 26	11 17	1 55	8 2	4 32	23 18	0 26	1 51	1 2	5 1	2 45	14 5	0 46	16 4	1 48	7 10	13 18	12 37	13 0	17 43	12 51	0 53		
M28	2 55	19 16	3 47	11 55	2 6	8 2	4 21	23 16	0 27	1 45	1 3	4 59	2 45	14 5	0 46	16 4	1 48	7 10	13 17	12 37	13 1	17 42	12 53	0 53		
T 29	3 19	18 42	2 58	12 31	2 17	8 2	4 10	23 13	0 29	1 39	1 3	4 57	2 45	14 6	0 46	16 3	1 48	7 10	13 17	12 37	13 2	17 41	12 54	0 53		
W30	3 42	17 20	2 2	13 3	2 27	8 1	4 0	23 11	0 30	1 34	1 3	4 56	2 45	14 6	0 46	16 3	1 48	7 11	13 17	12 36	13 3	17 41	12 55	0 53		
T 31	4n 5	15n12	1s 0	13n32	2n37	7s59	3n50	23s 9	0s31	1s28	1s 3	4s54	2n45	14n 7	0n46	16s 3	1n48	7n11	13s17	12n36	13n 4	17n40	12n56	0s53		

# ASTRODIENST EPHEMERIS for the year 2129

## geocentric

APRIL 2129

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	12 37 41	11°19'23	27°03'1	29°47	0°15	15°12	28°58	18°57	24°20	20°9	0°16	26°45	25°17	2°23	6°49	F 1
S 2	12 41 37	12°18'39	9°17'38	0°30	0°51	15°48	29°12	18°52	24°18	20°8	0°17	26°44	25°14	2°30	6°53	S 2
S 3	12 45 34	13°17'53	21°58	1°6	1°27	16°24	29°27	18°47	24°17	20°7	0°18	26°41	25°11	2°37	6°56	S 3
M 4	12 49 31	14°17'04	4°33	1°34	2°5	17°0	29°41	18°43	24°15	20°5	0°19	26°35	25°7	2°43	7°0	M 4
T 5	12 53 27	15°16'14	17°25	1°56	2°44	17°36	29°55	18°38	24°14	20°4	0°20	26°28	25°4	2°50	7°4	T 5
W 6	12 57 24	16°15'21	0°13	2°10	3°25	18°12	0°9	18°33	24°13	20°3	0°21	26°20	25°1	2°56	7°7	W 6
T 7	13 1 20	17°14'26	13°57	2°17	4°6	18°48	0°24	18°29	24°11	20°2	0°22	26°11	24°58	3°3	7°11	T 7
F 8	13 5 17	18°13'30	27°32	2°R17	4°48	19°24	0°38	18°24	24°10	20°0	0°23	26°3	24°55	3°10	7°15	F 8
S 9	13 9 13	19°12'32	11°18	2°10	5°32	20°0	0°52	18°20	24°9	19°59	0°24	25°56	24°52	3°16	7°18	S 9
S 10	13 13 10	20°11'32	25°13	1°57	6°16	20°35	1°6	18°15	24°8	19°58	0°25	25°51	24°48	3°23	7°22	S 10
M 11	13 17 6	21°10'30	9°13	1°38	7°1	21°11	1°20	18°10	24°7	19°56	0°26	25°49	24°45	3°30	7°26	M 11
T 12	13 21 3	22°9'26	23°18	1°13	7°47	21°46	1°34	18°6	24°6	19°55	0°28	25°48	24°42	3°36	7°29	T 12
W 13	13 25 0	23°8'21	7°27	0°44	8°35	22°22	1°48	18°1	24°5	19°53	0°29	25°48	24°39	3°43	7°33	W 13
T 14	13 28 56	24°7'14	21°38	0°10	9°22	22°57	2°2	17°56	24°4	19°52	0°30	25°49	24°36	3°50	7°37	T 14
F 15	13 32 53	25°6'06	5°50	29°32	10°11	23°32	2°16	17°52	24°3	19°51	0°31	25°49	24°32	3°56	7°41	F 15
S 16	13 36 49	26°4'55	20°0	28°52	11°0	24°7	2°30	17°47	24°2	19°49	0°32	25°46	24°29	4°3	7°44	S 16
S 17	13 40 46	27°3'43	4°6	28°10	11°50	24°42	2°44	17°43	24°1	19°48	0°33	25°42	24°26	4°10	7°48	S 17
M 18	13 44 42	28°2'29	18°3	27°26	12°41	25°17	2°58	17°38	24°1	19°46	0°34	25°34	24°23	4°16	7°52	M 18
T 19	13 48 39	29°1'13	1°47	26°42	13°33	25°52	3°12	17°34	24°0	19°45	0°36	25°24	24°20	4°23	7°56	T 19
W 20	13 52 35	29°59'55	15°14	25°59	14°25	26°27	3°26	17°29	23°59	19°43	0°37	25°13	24°17	4°30	7°59	W 20
T 21	13 56 32	0°58'35	28°23	25°17	15°18	27°1	3°39	17°25	23°59	19°42	0°38	25°2	24°13	4°36	8°3	T 21
F 22	14 0 29	1°57'13	11°12	24°36	16°11	27°36	3°53	17°20	23°58	19°40	0°39	24°52	24°10	4°43	8°7	F 22
S 23	14 4 25	2°55'49	23°43	23°59	17°5	28°10	4°7	17°16	23°58	19°39	0°40	24°44	24°7	4°50	8°11	S 23
S 24	14 8 22	3°54'23	5°56	23°24	17°59	28°45	4°20	17°11	23°57	19°37	0°42	24°38	24°4	4°56	8°15	S 24
M 25	14 12 18	4°52'55	17°56	22°53	18°54	29°19	4°34	17°7	23°57	19°35	0°43	24°34	24°1	5°3	8°19	M 25
T 26	14 16 15	5°51'25	29°48	22°26	19°49	29°53	4°47	17°3	23°57	19°34	0°44	24°33	23°58	5°10	8°22	T 26
W 27	14 20 11	6°49'52	11°37	22°4	20°45	0°27	5°1	16°58	23°56	19°32	0°45	24°D33	23°54	5°16	8°26	W 27
T 28	14 24 8	7°48'17	23°27	21°46	21°42	1°1	5°14	16°54	23°56	19°31	0°47	24°R33	23°51	5°23	8°30	T 28
F 29	14 28 4	8°46'40	5°16	21°33	22°39	1°35	5°27	16°50	23°56	19°29	0°48	24°33	23°48	5°29	8°34	F 29
S 30	14 32 1	9°45'01	17°36	21°25	23°36	2°8	5°41	16°46	23°56	19°28	0°49	24°31	23°45	5°36	8°38	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	4n29	12n24	0n 4	13n58	2n45	7s57	3n39	23s 6	0s33	1s22	1s 3	4s52	2n45	14n 7	0n46	16s 2	1n48	7n12	13s16	12n35	13n 5	17n39	12n57	0s53			
S 2	4 52	9 1	1 9	14 20	2 53	7 54	3 29	23 3	0 34	1 17	1 3	4 50	2 45	14 8	0 46	16 2	1 48	7 12	13 16	12 36	13 6	17 39	12 58	0 53			
S 3	5 15	5 13	2 12	14 39	2 59	7 51	3 19	23 0	0 36	1 11	1 3	4 49	2 45	14 8	0 46	16 1	1 48	7 13	13 16	12 37	13 7	17 38	12 59	0 53			
M 4	5 38	1 6	3 10	14 54	3 5	7 46	3 9	22 57	0 37	1 5	1 3	4 47	2 45	14 9	0 46	16 1	1 48	7 13	13 16	12 39	13 8	17 37	13 0	0 53			
T 5	6 1	3s 9	3 59	15 5	3 9	7 42	3 0	22 54	0 39	1 0	1 3	4 45	2 45	14 9	0 46	16 1	1 48	7 13	13 16	12 41	13 9	17 37	13 1	0 53			
W 6	6 23	7 20	4 37	15 13	3 12	7 36	2 50	22 51	0 40	0 54	1 3	4 43	2 45	14 10	0 46	16 0	1 48	7 14	13 15	12 44	13 10	17 36	13 2	0 53			
T 7	6 46	11 14	5 0	15 17	3 13	7 30	2 41	22 48	0 42	0 49	1 3	4 41	2 45	14 10	0 46	16 0	1 48	7 14	13 15	12 47	13 11	17 35	13 4	0 53			
F 8	7 8	14 37	5 6	15 17	3 13	7 24	2 31	22 44	0 43	0 43	1 3	4 40	2 45	14 10	0 46	16 0	1 48	7 15	13 15	12 50	13 12	17 34	13 5	0 53			
S 9	7 31	17 14	4 56	15 13	3 12	7 16	2 22	22 41	0 45	0 37	1 3	4 38	2 45	14 11	0 46	15 59	1 48	7 15	13 15	12 52	13 14	17 34	13 6	0 53			
S 10	7 53	18 53	4 28	15 6	3 9	7 9	2 13	22 37	0 47	0 32	1 3	4 36	2 45	14 11	0 46	15 59	1 48	7 15	13 14	12 54	13 15	17 33	13 7	0 53			
M11	8 15	19 23	3 43	14 55	3 4	7 0	2 4	22 33	0 48	0 26	1 3	4 34	2 45	14 11	0 46	15 58	1 48	7 16	13 14	12 54	13 16	17 32	13 8	0 54			
T 12	8 37	18 42	2 45	14 40	2 58	6 51	1 55	22 29	0 50	0 21	1 4	4 33	2 45	14 12	0 46	15 58	1 48	7 16	13 14	12 55	13 17	17 32	13 9	0 54			
W13	8 59	16 50	1 37	14 23	2 51	6 42	1 47	22 25	0 52	0 15	1 4	4 31	2 45	14 12	0 46	15 58	1 48	7 17	13 14	12 54	13 18	17 31	13 10	0 54			
T 14	9 21	13 56	0 22	14 2	2 41	6 32	1 39	22 21	0 53	0 10	1 4	4 29	2 45	14 12	0 46	15 57	1 48	7 17	13 14	12 54	13 19	17 30	13 12	0 54			
F 15	9 42	10 12	0s53	13 39	2 31	6 21	1 30	22 17	0 55	0 4	1 4	4 27	2 45	14 13	0 45	15 57	1 48	7 17	13 13	12 54	13 20	17 29	13 13	0 54			
S 16	10 4	5 53	2 6	13 14	2 19	6 10	1 22	22 12	0 57	0n 1	1 4	4 26	2 45	14 13	0 45	15 56	1 48	7 18	13 13	12 55	13 21	17 29	13 14	0 54			
S 17	10 25	1 16	3 10	12 46	2 6	5 58	1 14	22 8	0 59	0 7	1 4	4 24	2 45	14 13	0 45	15 56	1 48	7 18	13 13	12 57	13 22	17 28	13 15	0 54			
M18	10 46	3n21	4 1	12 17	1 52	5 46	1 6	22 3	1 0	0 12	1 4	4 22	2 45	14 13	0 45	15 56	1 48	7 19	13 13	12 59	13 23	17 27	13 16	0 54			
T 19	11 7	7 44	4 38	11 47	1 36	5 34	0 59	21 58	1 2	0 17	1 4	4 21	2 45	14 13	0 45	15 55	1 48	7 19	13 13	13 3	13 24	17 26	13 17	0 54			
W20	11 28	11 38	4 59	11 17	1 21	5 21	0 51	21 54	1 4	0 23	1 4	4 19	2 45	14 14	0 45	15 55	1 48	7 19	13 13	13 6	13 25	17 26	13 19	0 54			
T 21	11 48	14 52	5 3	10 46	1 4	5 7	0 44	21 49	1 6	0 28	1 4	4 17	2 45	14 14	0 45	15 54	1 48	7 20	13 12	13 10	13 26	17 25	13 20	0 54			
F 22	12 9	17 18	4 51	10 16	0 47	4 53	0 37	21 44	1 8	0 33	1 4	4 16	2 45	14 14	0 45	15 54	1 48	7 20	13 12	13 13	13 27	17 24	13 21	0 54			
S 23	12 29	18 51	4 26	9 46	0 30	4 39	0 30	21 39	1 10	0 39	1 5	4 14	2 45	14 14	0 45	15 53	1 48	7 21	13 12	13 16	13 28	17 23	13 22	0 54			
S 24	12 49	19 29	3 49	9 18	0 14	4 24	0 23	21 34	1 12	0 44	1 5	4 12	2 45	14 14	0 45	15 53	1 48	7 21	13 12	13 18	13 29	17 23	13 23	0 54			
M25	13 8	19 13	3 2	8 51	0s 3	4 8	0 16	21 29	1 13	0 49	1 5	4 11	2 45	14 14	0 45	15 53	1 48	7 21	13 12	13 19	13 30	17 22	13 24	0 54			
T 26	13 28	18 6	2 8	8 25	0 20	3 53	0 10	21 23	1 15	0 55	1 5	4 9	2 45	14 14	0 45	15 52	1 48	7 22	13 12	13 20	13 31	17 21	13 25	0 55			
W27	13 47	16 12	1 8	8 2	0 36	3 37	0 3	21 18	1 17	1 0	1 5	4 8	2 45	14 14	0 45	15 52	1 48	7 22	13 11	13 20	13 33	17 20	13 27	0 55			
T 28	14 6	13 36	0 6	7 41	0 51	3 20	0s 3	21 13	1 19	1 5	1 5	4 6	2 44	14 14	0 45	15 51	1 48	7 23	13 11	13 20	13 34	17 19	13 28	0 55			
F 29	14 25	10 24	0n58	7 22	1 6	3 4	0 9	21 7	1 21	1 10	1 5	4 5	2 44	14 14	0 45	15 51	1 48	7 23	13 11	13 20	13 35	17 19	13 29	0 55			
S 30	14n43	6n44	1n59	7n 6	1s21	2s46	0s15	21s 2	1s24	1n15	1s 5	4s 3	2n44	14n14	0n45	15s50	1n48	7n23	13s11	13n20	13n36	17n18	13n30	0s55			

# ASTRODIENST EPHEMERIS for the year 2129

## geocentric

MAY 2129

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	14 35 57	10♈43'20	0♉ 3	21°D21	24♊34	2♈42	5♉54	16°R42	23°D56	19°R26	0♈50	24°R26	23♉42	5♉43	8♈42	S 1
M 2	14 39 54	11°41'38	12°50	21°Y23	25°32	3°15	6° 7	16♈38	23♉56	19♈24	0°52	24♉19	23°38	5°49	8°45	M 2
T 3	14 43 51	12°39'53	25°59	21°29	26°30	3°48	6°20	16°34	23°56	19°23	0°53	24° 9	23°35	5°56	8°49	T 3
W 4	14 47 47	13°38'06	9♈28	21°41	27°29	4°21	6°33	16°30	23°56	19°21	0°54	23°58	23°32	6° 3	8°53	W 4
T 5	14 51 44	14°36'18	23°15	21°57	28°29	4°54	6°46	16°26	23°56	19°19	0°55	23°46	23°29	6° 9	8°57	T 5
F 6	14 55 40	15°34'27	7♈17	22°17	29°28	5°27	6°59	16°23	23°56	19°18	0°57	23°35	23°26	6°16	9° 1	F 6
S 7	14 59 37	16°32'36	21°29	22°42	0°Y28	6° 0	7°12	16°19	23°57	19°16	0°58	23°25	23°23	6°23	9° 5	S 7
S 8	15 3 33	17°30'43	5♈46	23°11	1°29	6°32	7°25	16°15	23°57	19°15	0°59	23°18	23°19	6°29	9° 8	S 8
M 9	15 7 30	18°28'48	20° 3	23°44	2°29	7° 4	7°37	16°12	23°57	19°13	1° 1	23°13	23°16	6°36	9°12	M 9
T 10	15 11 27	19°26'52	4♈17	24°21	3°30	7°37	7°50	16° 8	23°58	19°11	1° 2	23°11	23°13	6°43	9°16	T 10
W11	15 15 23	20°24'55	18°26	25° 2	4°32	8° 9	8° 3	16° 5	23°58	19°10	1° 3	23°11	23°10	6°49	9°20	W11
T 12	15 19 20	21°22'56	2♈29	25°47	5°33	8°41	8°15	16° 1	23°59	19° 8	1° 5	23°11	23° 7	6°56	9°24	T 12
F 13	15 23 16	22°20'56	16°25	26°35	6°35	9°12	8°27	15°58	23°59	19° 6	1° 6	23°10	23° 4	7° 3	9°27	F 13
S 14	15 27 13	23°18'55	0°Y14	27°27	7°37	9°44	8°40	15°55	24° 0	19° 5	1° 7	23° 7	23° 0	7° 9	9°31	S 14
S 15	15 31 9	24°16'52	13°55	28°22	8°40	10°15	8°52	15°52	24° 1	19° 3	1° 9	23° 1	22°57	7°16	9°35	S 15
M16	15 35 6	25°14'48	27°27	29°20	9°42	10°46	9° 4	15°49	24° 2	19° 2	1°10	22°52	22°54	7°23	9°39	M16
T 17	15 39 2	26°12'43	10♈47	0♈21	10°45	11°17	9°16	15°46	24° 2	19° 0	1°11	22°41	22°51	7°29	9°42	T 17
W18	15 42 59	27°10'36	23°54	1°25	11°49	11°48	9°28	15°43	24° 3	18°58	1°13	22°28	22°48	7°36	9°46	W18
T 19	15 46 55	28° 8'28	6♈47	2°32	12°52	12°18	9°40	15°40	24° 4	18°57	1°14	22°15	22°44	7°43	9°50	T 19
F 20	15 50 52	29° 6'19	19°25	3°42	13°56	12°48	9°52	15°37	24° 5	18°55	1°16	22° 3	22°41	7°49	9°53	F 20
S 21	15 54 49	0♈40'08	1♈47	4°54	14°59	13°18	10° 4	15°34	24° 6	18°53	1°17	21°53	22°38	7°56	9°57	S 21
S 22	15 58 45	1° 1'55	13°55	6° 9	16° 4	13°48	10°16	15°32	24° 7	18°52	1°18	21°45	22°35	8° 2	10° 1	S 22
M23	16 2 42	1°59'41	25°53	7°27	17° 8	14°18	10°27	15°29	24° 8	18°50	1°20	21°41	22°32	8° 9	10° 4	M23
T 24	16 6 38	2°57'25	7♈44	8°47	18°12	14°47	10°39	15°27	24°10	18°49	1°21	21°38	22°29	8°16	10° 8	T 24
W25	16 10 35	3°55'08	19°31	10°10	19°17	15°16	10°50	15°25	24°11	18°47	1°22	21°D37	22°25	8°22	10°12	W25
T 26	16 14 31	4°52'49	1♈21	11°35	20°22	15°45	11° 2	15°22	24°12	18°46	1°24	21°R37	22°22	8°29	10°15	T 26
F 27	16 18 28	5°50'29	13°19	13° 3	21°27	16°14	11°13	15°20	24°13	18°44	1°25	21°37	22°19	8°36	10°19	F 27
S 28	16 22 24	6°48'07	25°30	14°33	22°32	16°42	11°24	15°18	24°15	18°43	1°26	21°36	22°16	8°42	10°22	S 28
S 29	16 26 21	7°45'43	8♈ 0	16° 6	23°37	17°10	11°35	15°16	24°16	18°41	1°28	21°32	22°13	8°49	10°26	S 29
M30	16 30 18	8°43'18	20°52	17°41	24°43	17°38	11°46	15°14	24°18	18°39	1°29	21°27	22°10	8°56	10°29	M30
T 31	16 34 14	9♈40'52	4♈ 8	19♈18	25°Y48	18♈ 5	11°Y57	15♈13	24♉19	18♈38	1°30	21♈18	22♉ 6	9♈ 2	10♈33	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	15n 2	2n41	2n57	6n52	1s34	2s29	0s21	20s56	1s26	1n20	1s 5	4s 2	2n44	14n14	0n45	S 1
M 2	15 20	1s35	3 47	6 41	1 47	2 11	0 27	20 50	1 28	1 25	1 6	4 0	2 44	14 14	0 45	M 2
T 3	15 38	5 54	4 26	6 32	1 59	1 53	0 32	20 45	1 30	1 31	1 6	3 59	2 44	14 14	0 45	T 3
W 4	15 55	10 1	4 51	6 26	2 10	1 34	0 38	20 39	1 32	1 36	1 6	3 58	2 44	14 14	0 45	W 4
T 5	16 12	13 43	5 1	6 23	2 20	1 16	0 43	20 33	1 34	1 41	1 6	3 56	2 44	14 14	0 45	T 5
F 6	16 29	16 42	4 52	6 22	2 29	0 56	0 48	20 27	1 36	1 46	1 6	3 55	2 43	14 14	0 45	F 6
S 7	16 46	18 43	4 26	6 23	2 38	0 37	0 53	20 21	1 39	1 50	1 6	3 54	2 43	14 14	0 45	S 7
S 8	17 3	19 35	3 43	6 27	2 45	0 18	0 58	20 15	1 41	1 55	1 6	3 52	2 43	14 14	0 45	S 8
M 9	17 19	19 12	2 46	6 33	2 52	0n 2	1 2	20 9	1 43	2 0	1 6	3 51	2 43	14 14	0 45	M 9
T 10	17 35	17 35	1 38	6 41	2 58	0 22	1 7	20 3	1 46	2 5	1 7	3 50	2 43	14 13	0 45	T 10
W11	17 50	14 53	0 25	6 51	3 3	0 43	1 11	19 57	1 48	2 10	1 7	3 49	2 43	14 13	0 45	W11
T 12	18 6	11 21	0s49	7 3	3 7	1 3	1 15	19 51	1 50	2 15	1 7	3 48	2 43	14 13	0 44	T 12
F 13	18 21	7 11	2 0	7 17	3 10	1 24	1 19	19 45	1 53	2 19	1 7	3 47	2 42	14 13	0 44	F 13
S 14	18 35	2 42	3 2	7 33	3 13	1 45	1 23	19 39	1 55	2 24	1 7	3 46	2 42	14 13	0 44	S 14
S 15	18 50	1n53	3 54	7 51	3 15	2 6	1 27	19 33	1 58	2 29	1 7	3 45	2 42	14 12	0 44	S 15
M16	19 4	6 19	4 32	8 31	3 16	2 27	1 31	19 27	2 0	2 34	1 7	3 44	2 42	14 12	0 44	M16
T 17	19 17	10 23	4 54	8 31	3 17	2 49	1 34	19 21	2 3	2 38	1 8	3 43	2 42	14 12	0 44	T 17
W18	19 31	13 53	5 0	8 53	3 16	3 10	1 37	19 15	2 5	2 43	1 8	3 42	2 42	14 11	0 44	W18
T 19	19 44	16 39	4 51	9 17	3 16	3 32	1 41	19 9	2 8	2 47	1 8	3 41	2 41	14 11	0 44	T 19
F 20	19 57	18 33	4 27	9 42	3 14	3 54	1 44	19 3	2 11	2 52	1 8	3 40	2 41	14 11	0 44	F 20
S 21	20 9	19 33	3 52	10 8	3 12	4 16	1 47	18 57	2 13	2 56	1 8	3 39	2 41	14 10	0 44	S 21
S 22	20 21	19 37	3 6	10 35	3 9	4 38	1 49	18 50	2 16	3 1	1 8	3 38	2 41	14 10	0 44	S 22
M23	20 33	18 47	2 12	11 4	3 5	5 0	1 52	18 44	2 19	3 5	1 9	3 37	2 41	14 9	0 44	M23
T 24	20 44	17 9	1 13	11 33	3 1	5 22	1 55	18 38	2 22	3 9	1 9	3 37	2 40	14 9	0 44	T 24
W25	20 55	14 47	0 11	12 4	2 57	5 44	1 57	18 33	2 24	3 14	1 9	3 36	2 40	14 9	0 44	W25
T 26	21 6	11 47	0n52	12 35	2 51	6 6	1 59	18 27	2 27	3 18	1 9	3 35	2 40	14 8	0 44	T 26
F 27	21 16	8 17	1 53	13 7	2 46	6 29	2 2	18 21	2 30	3 22	1 9	3 35	2 40	14 8	0 44	F 27
S 28	21 26	4 23	2 50	13 39	2 39	6 51	2 4	18 15	2 33	3 26	1 9	3 34	2 39	14 7	0 44	S 28
S 29	21 35	0 12	3 40	14 12	2 32	7 13	2 5	18 9	2 36	3 31	1 10	3 34	2 39	14 7	0 44	S 29
M30	21 44	4s 6	4 21	14 46	2 25	7 35	2 7	18 3	2 39	3 35	1 10	3 33	2 39	14 6	0 44	M30
T 31	21n53	8s21	4n49	15n20	2s17	7n58	2s 9	17s58	2s42	3n39	1s10	3s33	2n39	14n 6	0n44	T 31

Julian Day Number = 2498781.5, Delta T = 108.56 sec  
 Ecliptic obliquity = 23°25'14, Nutation = - 0°00'12, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°32'50, Lahiri = 25°39'51

ASTRODIENST EPHEMERIS for the year 2129  
geocentric

JUNE 2129

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	16 38 11	10 <sup>II</sup> 38'24	17 <sup>M</sup> 50	20 <sup>8</sup> 58	26 <sup>V</sup> 54	18 <sup>≈</sup> 32	12 <sup>V</sup> 7	15°R11	24 <sup>Ω</sup> 21	18°R37	1 <sup>II</sup> 32	21°R 8	22 <sup>Ω</sup> 3	9 <sup>Ω</sup> 9	10 <sup>8</sup> 36	W 1
T 2	16 42 7	11°35'56	1 <sup>♂</sup> 56	22°40	28° 0	18°59	12°18	15 <sup>♂</sup> 9	24°22	18 <sup>M</sup> 35	1°33	20 <sup>Ω</sup> 58	22° 0	9°16	10°40	T 2
F 3	16 46 4	12°33'26	16°20	24°24	29° 6	19°26	12°29	15° 8	24°24	18°34	1°34	20°48	21°57	9°22	10°43	F 3
S 4	16 50 0	13°30'55	0 <sup>8</sup> 56	26°11	0 <sup>8</sup> 13	19°52	12°39	15° 7	24°26	18°32	1°36	20°39	21°54	9°29	10°46	S 4
S 5	16 53 57	14°28'24	15°38	28° 0	1°19	20°18	12°49	15° 5	24°28	18°31	1°37	20°33	21°50	9°36	10°50	S 5
M 6	16 57 54	15°25'51	0 <sup>≈</sup> 18	29°52	2°26	20°44	13° 0	15° 4	24°29	18°29	1°38	20°29	21°47	9°42	10°53	M 6
T 7	17 1 50	16°23'18	14°50	1 <sup>II</sup> 46	3°32	21° 9	13°10	15° 3	24°31	18°28	1°40	20°D27	21°44	9°49	10°56	T 7
W 8	17 5 47	17°20'44	29°11	3°42	4°39	21°34	13°20	15° 2	24°33	18°26	1°41	20°27	21°41	9°55	11° 0	W 8
T 9	17 9 43	18°18'09	13 <sup>♂</sup> 18	5°40	5°46	21°59	13°30	15° 1	24°35	18°25	1°42	20°R28	21°38	10° 2	11° 3	T 9
F 10	17 13 40	19°15'34	27°10	7°40	6°53	22°23	13°39	15° 0	24°37	18°24	1°44	20°28	21°35	10° 9	11° 6	F 10
S 11	17 17 36	20°12'58	10 <sup>V</sup> 48	9°43	8° 1	22°47	13°49	15° 0	24°39	18°22	1°45	20°26	21°31	10°15	11° 9	S 11
S 12	17 21 33	21°10'21	24°12	11°47	9° 8	23°11	13°59	14°59	24°41	18°21	1°46	20°22	21°28	10°22	11°12	S 12
M13	17 25 29	22° 7'44	7 <sup>8</sup> 24	13°53	10°15	23°34	14° 8	14°59	24°43	18°20	1°48	20°15	21°25	10°29	11°16	M13
T 14	17 29 26	23° 5'07	20°23	16° 0	11°23	23°56	14°17	14°58	24°46	18°19	1°49	20° 7	21°22	10°35	11°19	T 14
W15	17 33 23	24° 2'29	3 <sup>II</sup> 9	18° 9	12°31	24°19	14°26	14°58	24°48	18°17	1°50	19°57	21°19	10°42	11°22	W15
T 16	17 37 19	24°59'50	15°43	20°19	13°39	24°40	14°35	14°58	24°50	18°16	1°51	19°47	21°16	10°49	11°25	T 16
F 17	17 41 16	25°57'11	28° 5	22°30	14°46	25° 2	14°44	14°D58	24°52	18°15	1°53	19°38	21°12	10°55	11°28	F 17
S 18	17 45 12	26°54'31	10 <sup>8</sup> 15	24°42	15°54	25°23	14°53	14°58	24°55	18°14	1°54	19°30	21° 9	11° 2	11°31	S 18
S 19	17 49 9	27°51'51	22°16	26°54	17° 3	25°43	15° 2	14°58	24°57	18°12	1°55	19°25	21° 6	11° 9	11°34	S 19
M20	17 53 5	28°49'10	4 <sup>Ω</sup> 9	29° 6	18°11	26° 3	15°10	14°58	25° 0	18°11	1°56	19°21	21° 3	11°15	11°37	M20
T 21	17 57 2	29°46'28	15°57	1 <sup>8</sup> 17	19°19	26°23	15°19	14°58	25° 2	18°10	1°58	19°D20	21° 0	11°22	11°39	T 21
W22	18 0 58	0 <sup>8</sup> 43'45	27°43	3°28	20°28	26°42	15°27	14°59	25° 4	18° 9	1°59	19°20	20°56	11°29	11°42	W22
T 23	18 4 55	1°41'01	9 <sup>♂</sup> 33	5°39	21°36	27° 0	15°35	14°59	25° 7	18° 8	2° 0	19°21	20°53	11°35	11°45	T 23
F 24	18 8 52	2°38'17	21°30	7°48	22°45	27°18	15°43	15° 0	25°10	18° 7	2° 1	19°23	20°50	11°42	11°48	F 24
S 25	18 12 48	3°35'32	3 <sup>♂</sup> 41	9°57	23°53	27°35	15°51	15° 0	25°12	18° 6	2° 2	19°R23	20°47	11°48	11°50	S 25
S 26	18 16 45	4°32'47	16° 9	12° 4	25° 2	27°52	15°58	15° 1	25°15	18° 5	2° 4	19°22	20°44	11°55	11°53	S 26
M27	18 20 41	5°30'01	28°59	14° 9	26°11	28° 9	16° 6	15° 2	25°18	18° 4	2° 5	19°20	20°41	12° 2	11°56	M27
T 28	18 24 38	6°27'14	12 <sup>M</sup> 16	16°13	27°20	28°24	16°13	15° 3	25°20	18° 3	2° 6	19°16	20°37	12° 8	11°58	T 28
W29	18 28 34	7°24'27	26° 1	18°15	28°29	28°40	16°21	15° 4	25°23	18° 2	2° 7	19°10	20°34	12°15	12° 1	W29
T 30	18 32 31	8°21'39	10 <sup>♂</sup> 12	20 <sup>8</sup> 15	29 <sup>8</sup> 38	28 <sup>≈</sup> 54	16°V28	15 <sup>♂</sup> 5	25 <sup>Ω</sup> 26	18 <sup>M</sup> 1	2 <sup>II</sup> 8	19 <sup>Ω</sup> 4	20 <sup>Ω</sup> 31	12 <sup>Ω</sup> 22	12 <sup>8</sup> 3	T 30

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑	♒	♓	♈	♉		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	decl	lat	
W 1	22n 1	12s18	5n 2	15n54	2s 9	8n20	2s10	17s52	2s45	3n43	1s10	3s32	2n39	14n 5	0n44	15s37	1n48	7n33	13s 9	14n26	14n 9	16n51	14n 5	0s58
T 2	22 9	15 40	4 57	16 29	2 0	8 42	2 12	17 47	2 48	3 47	1 10	3 32	2 38	14 4	0 44	15 36	1 48	7 33	13 9	14 30	14 10	16 50	14 6	0 58
F 3	22 17	18 11	4 34	17 4	1 51	9 4	2 13	17 41	2 51	3 51	1 11	3 31	2 38	14 4	0 44	15 36	1 48	7 34	13 9	14 33	14 11	16 49	14 7	0 58
S 4	22 24	19 33	3 52	17 38	1 42	9 26	2 14	17 36	2 54	3 54	1 11	3 31	2 38	14 3	0 44	15 36	1 48	7 34	13 9	14 36	14 12	16 48	14 8	0 58
S 5	22 31	19 37	2 54	18 12	1 32	9 48	2 15	17 30	2 57	3 58	1 11	3 31	2 38	14 3	0 44	15 35	1 48	7 34	13 9	14 38	14 13	16 47	14 9	0 58
M 6	22 37	18 21	1 45	18 46	1 22	10 10	2 16	17 25	3 0	4 2	1 11	3 31	2 37	14 2	0 44	15 35	1 48	7 34	13 9	14 39	14 14	16 46	14 9	0 58
T 7	22 44	15 54	0 30	19 20	1 11	10 32	2 17	17 20	3 4	4 6	1 11	3 30	2 37	14 1	0 44	15 35	1 48	7 35	13 9	14 40	14 15	16 45	14 10	0 58
W 8	22 49	12 29	0s46	19 53	1 1	10 54	2 18	17 15	3 7	4 9	1 12	3 30	2 37	14 1	0 44	15 34	1 48	7 35	13 9	14 39	14 16	16 44	14 11	0 58
T 9	22 54	8 23	1 59	20 25	0 50	11 16	2 18	17 10	3 10	4 13	1 12	3 30	2 37	14 0	0 43	15 34	1 48	7 35	13 9	14 39	14 17	16 43	14 12	0 59
F 10	22 59	3 56	3 3	20 56	0 39	11 37	2 19	17 5	3 14	4 17	1 12	3 30	2 36	13 59	0 43	15 34	1 48	7 35	13 9	14 39	14 18	16 42	14 13	0 59
S 11	23 4	0n39	3 56	21 26	0 28	11 58	2 19	17 1	3 17	4 20	1 12	3 30	2 36	13 59	0 43	15 33	1 48	7 35	13 9	14 40	14 19	16 41	14 14	0 59
S 12	23 8	5 8	4 34	21 54	0 17	12 19	2 19	16 56	3 20	4 24	1 12	3 30	2 36	13 58	0 43	15 33	1 48	7 36	13 9	14 41	14 20	16 40	14 15	0 59
M13	23 11	9 16	4 58	22 21	0 6	12 40	2 20	16 52	3 24	4 27	1 13	3 30	2 36	13 57	0 43	15 33	1 48	7 36	13 10	14 43	14 21	16 39	14 16	0 59
T 14	23 14	12 55	5 5	22 46	0n 5	13 1	2 20	16 47	3 27	4 31	1 13	3 30	2 35	13 56	0 43	15 32	1 48	7 36	13 10	14 46	14 22	16 38	14 17	0 59
W15	23 17	15 54	4 57	23 9	0 15	13 22	2 20	16 43	3 31	4 34	1 13	3 30	2 35	13 56	0 43	15 32	1 48	7 36	13 10	14 49	14 23	16 37	14 17	0 59
T 16	23 20	18 6	4 35	23 30	0 26	13 42	2 19	16 39	3 34	4 37	1 13	3 30	2 35	13 55	0 43	15 32	1 48	7 36	13 10	14 52	14 24	16 36	14 18	0 59
F 17	23 21	19 24	4 0	23 48	0 36	14 2	2 19	16 35	3 38	4 40	1 14	3 31	2 35	13 54	0 43	15 31	1 48	7 36	13 10	14 55	14 25	16 35	14 19	0 59
S 18	23 23	19 48	3 14	24 4	0 45	14 22	2 19	16 32	3 42	4 44	1 14	3 31	2 34	13 53	0 43	15 31	1 48	7 37	13 10	14 57	14 26	16 35	14 20	1 0
S 19	23 24	19 16	2 21	24 18	0 55	14 42	2 18	16 28	3 45	4 47	1 14	3 31	2 34	13 52	0 43	15 31	1 48	7 37	13 10	14 59	14 27	16 34	14 21	1 0
M20	23 25	17 53	1 21	24 28	1 3	15 1	2 18	16 25	3 49	4 50	1 14	3 31	2 34	13 52	0 43	15 31	1 48	7 37	13 10	15 0	14 28	16 33	14 21	1 0
T 21	23 25	15 45	0 18	24 36	1 11	15 21	2 17	16 21	3 53	4 53	1 14	3 32	2 34	13 51	0 43	15 30	1 48	7 37	13 10	15 1	14 29	16 32	14 22	1 0
W22	23 25	12 58	0n45	24 41	1 19	15 39	2 16	16 18	3 56	4 56	1 15	3 32	2 33	13 50	0 43	15 30	1 48	7 37	13 10	15 1	14 30	16 31	14 23	1 0
T 23	23 25	9 38	1 47	24 44	1 26	15 58	2 16	16 16	4 0	4 59	1 15	3 33	2 33	13 49	0 43	15 30	1 48	7 37	13 10	15 0	14 31	16 30	14 24	1 0
F 24	23 24	5 54	2 45	24 43	1 32	16 16	2 15	16 13	4 4	5 2	1 15	3 33	2 33	13 48	0 43	15 29	1 47	7 37	13 10	15 0	14 32	16 29	14 24	1 0
S 25	23 22	1 52	3 37	24 40	1 37	16 34	2 14	16 10	4 8	5 4	1 15	3 34	2 33	13 47	0 43	15 29	1 47	7 37	13 11	15 0	14 33	16 28	14 25	1 0
S 26	23 21	2s21	4 20	24 34	1 42	16 52	2 12	16 8	4 11	5 7	1 16	3 34	2 32	13 46	0 43	15 29	1 47	7 38	13 11	15 0	14 34	16 27	14 26	1 0
M27	23 18	6 34	4 51	24 25	1 46	17 9	2 11	16 6	4 15	5 10	1 16	3 35	2 32	13 45	0 43	15 29	1 47	7 38	13 11	15 1	14 35	16 26	14 26	1 1
T 28	23 16	10 37	5 8	24 14	1 49	17 26	2 10	16 4	4 19	5 12	1 16	3 35	2 32	13 44	0 43	15 29	1 47	7 38	13 11	15 2	14 36	16 25	14 27	1 1
W29	23 13	14 15	5 8	24 1	1 51	17 43	2 9	16 2	4 23	5 15	1 16	3 36	2 32	13 43	0 43	15 28	1 47	7 38	13 11	15 4	14 37	16 24	14 28	1 1
T 30	23n 9	17s11	4n49	23n45	1n53	17n59	2s 7	16s 1	4s27	5n17	1s17	3s37	2n31	13n42	0n43	15s28	1n47	7n38	13s11	15n 6	14n38	16n23	14n28	1s 1

# ASTRODIENST EPHEMERIS for the year 2129

## geocentric

JULY 2129

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	18 36 27	9♂18'51	24♂46	22♂14	0♂47	29♂8	16♂35	15♂7	25♂29	18♂R 0	2♂II 9	18♂R58	20♂28	12♂28	12♂6	F 1
S 2	18 40 24	10°16'03	9♂38	24°10	1°57	29°22	16°41	15°8	25°32	17♂59	2°10	18♂53	20°25	12°35	12°8	S 2
S 3	18 44 21	11°13'15	24°39	26°4	3°6	29°35	16°48	15°10	25°34	17°59	2°12	18°50	20°22	12°42	12°11	S 3
M 4	18 48 17	12°10'26	9♂40	27°57	4°15	29°47	16°55	15°11	25°37	17°58	2°13	18°48	20°18	12°48	12°13	M 4
T 5	18 52 14	13°7'38	24°33	29°47	5°25	29°58	17°1	15°13	25°40	17°57	2°14	18°D48	20°15	12°55	12°15	T 5
W 6	18 56 10	14°4'50	9♂12	1♂35	6°35	0♂9	17°7	15°15	25°43	17°56	2°15	18°49	20°12	13°2	12°17	W 6
T 7	19 0 7	15°2'01	23°31	3°21	7°44	0°19	17°13	15°17	25°46	17°55	2°16	18°50	20°9	13°8	12°20	T 7
F 8	19 4 3	15°59'13	7♂30	5°5	8°54	0°29	17°19	15°19	25°49	17°55	2°17	18°51	20°6	13°15	12°22	F 8
S 9	19 8 0	16°56'26	21°8	6°47	10°4	0°38	17°25	15°21	25°53	17°54	2°18	18°R52	20°2	13°22	12°24	S 9
S 10	19 11 56	17°53'39	4♂26	8°27	11°14	0°46	17°30	15°23	25°56	17°53	2°19	18°50	19°59	13°28	12°26	S 10
M 11	19 15 53	18°50'52	17°26	10°5	12°24	0°53	17°35	15°25	25°59	17°53	2°20	18°48	19°56	13°35	12°28	M 11
T 12	19 19 50	19°48'05	0♂II 9	11°40	13°34	1°0	17°41	15°27	26°2	17°52	2°21	18°44	19°53	13°41	12°30	T 12
W 13	19 23 46	20°45'19	12°39	13°14	14°44	1°6	17°46	15°30	26°5	17°52	2°22	18°40	19°50	13°48	12°32	W 13
T 14	19 27 43	21°42'34	24°57	14°45	15°54	1°11	17°51	15°32	26°8	17°51	2°23	18°35	19°47	13°55	12°34	T 14
F 15	19 31 39	22°39'48	7♂5	16°15	17°4	1°15	17°55	15°35	26°12	17°51	2°24	18°31	19°43	14°1	12°36	F 15
S 16	19 35 36	23°37'03	19°4	17°42	18°15	1°19	18°0	15°38	26°15	17°50	2°25	18°28	19°40	14°8	12°37	S 16
S 17	19 39 32	24°34'19	0♂25	19°7	19°25	1°22	18°4	15°41	26°18	17°50	2°26	18°26	19°37	14°15	12°39	S 17
M 18	19 43 29	25°31'34	12°46	20°30	20°36	1°24	18°8	15°44	26°22	17°49	2°26	18°D25	19°34	14°21	12°41	M 18
T 19	19 47 25	26°28'50	24°32	21°51	21°46	1°25	18°12	15°47	26°25	17°49	2°27	18°25	19°31	14°28	12°42	T 19
W 20	19 51 22	27°26'06	6♂20	23°9	22°57	1°R26	18°16	15°50	26°28	17°49	2°28	18°25	19°27	14°35	12°44	W 20
T 21	19 55 19	28°23'22	18°11	24°25	24°8	1°25	18°19	15°53	26°32	17°48	2°29	18°27	19°24	14°41	12°46	T 21
F 22	19 59 15	29°20'39	0♂10	25°39	25°18	1°24	18°23	15°56	26°35	17°48	2°30	18°28	19°21	14°48	12°47	F 22
S 23	20 3 12	0♂17'55	12°21	26°50	26°29	1°23	18°26	15°59	26°38	17°48	2°31	18°30	19°18	14°55	12°48	S 23
S 24	20 7 8	1°15'12	24°48	27°59	27°40	1°20	18°29	16°3	26°42	17°48	2°31	18°30	19°15	15°1	12°50	S 24
M 25	20 11 5	2°12'30	7♂36	29°5	28°51	1°17	18°32	16°6	26°45	17°48	2°32	18°R30	19°12	15°8	12°51	M 25
T 26	20 15 1	3°9'47	20°48	0♂9	0♂2	1°13	18°35	16°10	26°49	17°47	2°33	18°30	19°8	15°15	12°52	T 26
W 27	20 18 58	4°7'05	4♂26	1°9	1°13	1°8	18°37	16°14	26°52	17°47	2°34	18°29	19°5	15°21	12°54	W 27
T 28	20 22 54	5°4'23	18°32	2°7	2°24	1°2	18°39	16°17	26°56	17°47	2°34	18°27	19°2	15°28	12°55	T 28
F 29	20 26 51	6°1'42	3♂3	3°2	3°35	0°56	18°41	16°21	26°59	17°47	2°35	18°25	18°59	15°34	12°56	F 29
S 30	20 30 48	6°59'01	17°57	3°54	4°46	0°49	18°43	16°25	27°3	17°D47	2°36	18°24	18°56	15°41	12°57	S 30
S 31	20 34 44	7♂56'21	3♂3	4♂42	5♂58	0♂41	18°45	16°29	27♂7	17♂47	2♂II36	18♂23	18♂53	15♂48	12♂58	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	23n 6	19s 7	4n12	23n28	1n54	18n15	2s 6	16s 0	4s31	5n20	1s17	3s37	2n31	13n41	0n43	F 1
S 2	23 1	19 48	3 17	23 8	1 54	18 30	2 4	15 59	4 35	5 22	1 17	3 38	2 31	13 40	0 43	S 2
S 3	22 57	19 5	2 8	22 47	1 54	18 45	2 3	15 58	4 39	5 24	1 17	3 39	2 31	13 39	0 43	S 3
M 4	22 52	17 1	0 50	22 24	1 53	19 0	2 1	15 57	4 43	5 27	1 18	3 40	2 30	13 38	0 43	M 4
T 5	22 46	13 49	0s31	21 59	1 51	19 14	1 59	15 57	4 47	5 29	1 18	3 41	2 30	13 37	0 43	T 5
W 6	22 41	9 48	1 49	21 33	1 48	19 28	1 57	15 57	4 51	5 31	1 18	3 42	2 30	13 36	0 43	W 6
T 7	22 34	5 18	2 59	21 6	1 45	19 41	1 55	15 57	4 55	5 33	1 18	3 43	2 30	13 35	0 43	T 7
F 8	22 28	0 38	3 55	20 38	1 42	19 54	1 53	15 57	4 59	5 35	1 19	3 44	2 29	13 34	0 43	F 8
S 9	22 21	3n57	4 37	20 8	1 37	20 6	1 51	15 58	5 3	5 37	1 19	3 45	2 29	13 33	0 43	S 9
S 10	22 13	8 13	5 3	19 38	1 33	20 18	1 49	15 59	5 7	5 39	1 19	3 46	2 29	13 32	0 43	S 10
M 11	22 6	12 0	5 13	19 6	1 27	20 30	1 47	16 0	5 11	5 41	1 19	3 47	2 29	13 31	0 43	M 11
T 12	21 58	15 10	5 7	18 34	1 21	20 41	1 45	16 1	5 15	5 42	1 20	3 48	2 28	13 30	0 43	T 12
W 13	21 49	17 34	4 46	18 2	1 15	20 51	1 43	16 3	5 19	5 44	1 20	3 49	2 28	13 29	0 43	W 13
T 14	21 40	19 7	4 13	17 29	1 8	21 1	1 40	16 5	5 23	5 46	1 20	3 50	2 28	13 28	0 43	T 14
F 15	21 31	19 46	3 28	16 55	1 1	21 10	1 38	16 7	5 27	5 47	1 20	3 51	2 28	13 27	0 43	F 15
S 16	21 21	19 31	2 35	16 21	0 53	21 19	1 35	16 9	5 31	5 49	1 21	3 53	2 27	13 25	0 43	S 16
S 17	21 11	18 23	1 35	15 47	0 45	21 27	1 33	16 12	5 35	5 50	1 21	3 54	2 27	13 24	0 43	S 17
M 18	21 1	16 28	0 31	15 13	0 36	21 35	1 30	16 15	5 39	5 51	1 21	3 55	2 27	13 23	0 43	M 18
T 19	20 50	13 52	0n34	14 38	0 27	21 42	1 28	16 18	5 43	5 52	1 22	3 57	2 27	13 22	0 42	T 19
W 20	20 39	10 42	1 37	14 4	0 18	21 49	1 25	16 21	5 47	5 54	1 22	3 58	2 27	13 21	0 42	W 20
T 21	20 28	7 5	2 37	13 30	0 8	21 55	1 23	16 25	5 50	5 55	1 22	4 0	2 26	13 20	0 42	T 21
F 22	20 16	3 10	3 31	12 56	0s 2	22 0	1 20	16 28	5 54	5 56	1 22	4 1	2 26	13 19	0 42	F 22
S 23	20 4	0s57	4 16	12 22	0 13	22 5	1 17	16 32	5 58	5 57	1 23	4 2	2 26	13 17	0 42	S 23
S 24	19 52	5 6	4 50	11 48	0 23	22 9	1 15	16 37	6 1	5 58	1 23	4 4	2 26	13 16	0 42	S 24
M 25	19 39	9 7	5 11	11 15	0 34	22 13	1 12	16 41	6 5	5 58	1 23	4 6	2 25	13 15	0 42	M 25
T 26	19 26	12 51	5 17	10 42	0 46	22 16	1 9	16 46	6 8	5 59	1 23	4 7	2 25	13 14	0 42	T 26
W 27	19 13	16 1	5 5	10 10	0 57	22 19	1 6	16 51	6 12	6 0	1 24	4 9	2 25	13 13	0 42	W 27
T 28	18 59	18 22	4 34	9 38	1 9	22 21	1 3	16 56	6 15	6 1	1 24	4 10	2 25	13 11	0 42	T 28
F 29	18 45	19 37	3 46	9 8	1 21	22 22	1 1	17 1	6 18	6 1	1 24	4 12	2 24	13 10	0 42	F 29
S 30	18 31	19 33	2 41	8 38	1 33	22 22	0 58	17 6	6 21	6 2	1 25	4 14	2 24	13 9	0 42	S 30
S 31	18n16	18s 6	1n24	8n 9	1s45	22n22	0s55	17s12	6s24	6n 2	1s25	4s16	2n24	13n 8	0n42	S 31

Julian Day Number = 2498842.5, Delta T = 108.66 sec  
 Ecliptic obliquity = 23°25'13, Nutation = - 0°00'11, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°32'59, Lahiri = 25°39'59



# ASTRODIENST EPHEMERIS for the year 2129

## geocentric

AUGUST 2129

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	20 38 41	8♂53'42	18♂15	5♂27	7♂9	0°R33	18♂47	16♂33	27♂10	17♂47	2♂37	18°D23	18♂49	15♂54	12♂59	M 1
T 2	20 42 37	9°51'03	3♂23	6°9	8°20	0♂24	18°48	16°37	27°14	17°47	2°38	18♂23	18°46	16°1	13°0	T 2
W 3	20 46 34	10°48'26	18°18	6°46	9°32	0°14	18°49	16°42	27°17	17°47	2°38	18°24	18°43	16°8	13°0	W 3
T 4	20 50 30	11°45'49	2♂53	7°20	10°44	0°4	18°50	16°46	27°21	17°48	2°39	18°24	18°40	16°14	13°1	T 4
F 5	20 54 27	12°43'13	17°3	7°50	11°55	29♂53	18°51	16°50	27°25	17°48	2°40	18°25	18°37	16°21	13°2	F 5
S 6	20 58 23	13°40'39	0♂49	8°15	13°7	29°41	18°51	16°55	27°28	17°48	2°40	18°25	18°33	16°28	13°3	S 6
S 7	21 2 20	14°38'05	14°9	8°36	14°19	29°29	18°52	16°59	27°32	17°48	2°41	18°R25	18°30	16°34	13°3	S 7
M 8	21 6 17	15°35'34	27°6	8°52	15°30	29°16	18°R52	17°4	27°36	17°49	2°41	18°25	18°27	16°41	13°4	M 8
T 9	21 10 13	16°33'03	9♂43	9°4	16°42	29°3	18°52	17°9	27°39	17°49	2°42	18°25	18°24	16°48	13°4	T 9
W10	21 14 10	17°30'34	22°3	9°10	17°54	28°49	18°51	17°14	27°43	17°49	2°42	18°25	18°21	16°54	13°5	W10
T 11	21 18 6	18°28'06	4♂11	9°R11	19°6	28°35	18°51	17°18	27°47	17°50	2°43	18°D25	18°18	17°1	13°5	T 11
F 12	21 22 3	19°25'39	16°9	9°7	20°18	28°21	18°50	17°23	27°51	17°50	2°43	18°25	18°14	17°7	13°5	F 12
S 13	21 25 59	20°23'13	28°0	8°57	21°30	28°6	18°49	17°28	27°54	17°50	2°43	18°25	18°11	17°14	13°6	S 13
S 14	21 29 56	21°20'49	9♂48	8°42	22°42	27°51	18°48	17°33	27°58	17°51	2°44	18°25	18°8	17°21	13°6	S 14
M15	21 33 52	22°18'26	21°35	8°22	23°55	27°36	18°47	17°38	28°2	17°51	2°44	18°R25	18°5	17°27	13°6	M15
T 16	21 37 49	23°16'04	3♂23	7°56	25°7	27°20	18°46	17°44	28°5	17°52	2°45	18°25	18°2	17°34	13°6	T 16
W17	21 41 46	24°13'43	15°15	7°25	26°19	27°4	18°44	17°49	28°9	17°52	2°45	18°25	17°59	17°41	13°R 6	W17
T 18	21 45 42	25°11'23	27°12	6°50	27°32	26°48	18°42	17°54	28°13	17°53	2°45	18°24	17°55	17°47	13°6	T 18
F 19	21 49 39	26°9'04	9♂18	6°9	28°44	26°33	18°40	17°59	28°17	17°54	2°46	18°23	17°52	17°54	13°6	F 19
S 20	21 53 35	27°6'47	21°35	5°25	29°57	26°17	18°38	18°5	28°20	17°54	2°46	18°22	17°49	18°1	13°6	S 20
S 21	21 57 32	28°4'30	4♂6	4°37	1♂9	26°1	18°35	18°10	28°24	17°55	2°46	18°21	17°46	18°7	13°6	S 21
M22	22 1 28	29°2'15	16°54	3°47	2°22	25°45	18°33	18°16	28°28	17°56	2°46	18°20	17°43	18°14	13°5	M22
T 23	22 5 25	0♂0'00	0♂2	2°55	3°34	25°29	18°30	18°22	28°32	17°56	2°47	18°D20	17°39	18°21	13°5	T 23
W24	22 9 21	0°57'47	13°32	2°2	4°47	25°14	18°27	18°27	28°35	17°57	2°47	18°20	17°36	18°27	13°5	W24
T 25	22 13 18	1°55'35	27°27	1°10	6°0	24°59	18°24	18°33	28°39	17°58	2°47	18°21	17°33	18°34	13°4	T 25
F 26	22 17 15	2°53'25	11♂46	0°18	7°13	24°44	18°20	18°39	28°43	17°59	2°47	18°22	17°30	18°40	13°4	F 26
S 27	22 21 11	3°51'15	26°26	29♂30	8°25	24°29	18°17	18°45	28°47	18°0	2°47	18°23	17°27	18°47	13°3	S 27
S 28	22 25 8	4°49'07	11♂24	28°44	9°38	24°15	18°13	18°50	28°50	18°1	2°47	18°R24	17°24	18°54	13°3	S 28
M29	22 29 4	5°47'00	26°31	28°4	10°51	24°1	18°9	18°56	28°54	18°2	2°47	18°24	17°20	19°0	13°2	M29
T 30	22 33 1	6°44'54	11♂40	27°28	12°4	23°47	18°5	19°2	28°58	18°3	2°47	18°23	17°17	19°7	13°1	T 30
W31	22 36 57	7♂42'50	26♂41	26♂59	13♂17	23♂34	18♂1	19♂8	29♂2	18♂4	2♂48	18♂21	17♂14	19♂14	13♂0	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	18n 1	15s20	0n 1	7n41	1s57	22n22	0s52	17s17	6s27	6n 2	1s25	4s17	2n24	13n 6	0n42	15s26
T 2	17 46	11 32	1s22	7 14	2 10	22 21	0 49	17 23	6 29	6 2	1 25	4 19	2 24	13 5	0 42	15 26
W 3	17 31	7 4	2 39	6 49	2 22	22 19	0 46	17 29	6 32	6 3	1 26	4 21	2 23	13 4	0 42	15 26
T 4	17 15	2 16	3 43	6 25	2 35	22 16	0 43	17 35	6 34	6 3	1 26	4 23	2 23	13 3	0 42	15 26
F 5	16 59	2n31	4 32	6 3	2 47	22 13	0 40	17 41	6 37	6 3	1 26	4 25	2 23	13 1	0 42	15 26
S 6	16 42	7 0	5 3	5 42	2 59	22 10	0 37	17 47	6 39	6 3	1 27	4 26	2 23	13 0	0 42	15 27
S 7	16 26	11 1	5 17	5 23	3 11	22 5	0 34	17 53	6 41	6 3	1 27	4 28	2 23	12 59	0 42	15 27
M 8	16 9	14 23	5 14	5 6	3 23	22 0	0 31	18 0	6 43	6 2	1 27	4 30	2 22	12 58	0 42	15 27
T 9	15 52	17 0	4 56	4 51	3 34	21 55	0 28	18 6	6 44	6 2	1 27	4 32	2 22	12 56	0 42	15 27
W10	15 34	18 46	4 25	4 39	3 45	21 48	0 25	18 12	6 46	6 2	1 28	4 34	2 22	12 55	0 42	15 27
T 11	15 17	19 39	3 42	4 28	3 56	21 42	0 22	18 18	6 47	6 1	1 28	4 36	2 22	12 54	0 42	15 27
F 12	14 59	19 38	2 50	4 21	4 6	21 34	0 19	18 24	6 48	6 1	1 28	4 38	2 22	12 53	0 42	15 27
S 13	14 41	18 44	1 51	4 16	4 15	21 26	0 16	18 30	6 49	6 0	1 29	4 40	2 21	12 51	0 42	15 28
S 14	14 22	17 1	0 48	4 14	4 23	21 17	0 13	18 36	6 50	6 0	1 29	4 43	2 21	12 50	0 42	15 28
M15	14 4	14 35	0n18	4 15	4 30	21 8	0 11	18 42	6 50	5 59	1 29	4 45	2 21	12 49	0 42	15 28
T 16	13 45	11 32	1 22	4 19	4 36	20 58	0 8	18 48	6 50	5 58	1 29	4 47	2 21	12 47	0 42	15 28
W17	13 26	8 1	2 24	4 26	4 41	20 48	0 5	18 54	6 50	5 57	1 30	4 49	2 21	12 46	0 42	15 28
T 18	13 7	4 10	3 19	4 36	4 44	20 37	0 2	18 59	6 50	5 56	1 30	4 51	2 21	12 45	0 42	15 29
F 19	12 47	0 6	4 7	4 49	4 46	20 25	0n 1	19 4	6 50	5 55	1 30	4 53	2 20	12 43	0 42	15 29
S 20	12 28	4s 1	4 43	5 5	4 46	20 13	0 4	19 9	6 50	5 54	1 30	4 56	2 20	12 42	0 42	15 29
S 21	12 8	8 3	5 8	5 24	4 44	20 0	0 7	19 14	6 49	5 53	1 31	4 58	2 20	12 41	0 42	15 29
M22	11 48	11 48	5 17	5 45	4 41	19 46	0 9	19 19	6 48	5 52	1 31	5 0	2 20	12 40	0 42	15 30
T 23	11 28	15 5	5 11	6 9	4 35	19 32	0 12	19 23	6 47	5 50	1 31	5 2	2 20	12 38	0 42	15 30
W24	11 7	17 39	4 47	6 34	4 28	19 18	0 15	19 27	6 46	5 49	1 31	5 5	2 20	12 37	0 42	15 30
T 25	10 47	19 17	4 6	7 1	4 18	19 3	0 18	19 31	6 44	5 48	1 32	5 7	2 19	12 36	0 42	15 30
F 26	10 26	19 45	3 9	7 30	4 7	18 47	0 20	19 35	6 42	5 46	1 32	5 9	2 19	12 34	0 42	15 31
S 27	10 5	18 54	1 59	7 58	3 55	18 31	0 23	19 38	6 41	5 44	1 32	5 12	2 19	12 33	0 42	15 31
S 28	9 44	16 44	0 39	8 27	3 40	18 14	0 26	19 41	6 39	5 43	1 32	5 14	2 19	12 32	0 42	15 31
M29	9 23	13 22	0s45	8 56	3 25	17 57	0 28	19 44	6 36	5 41	1 33	5 16	2 19	12 31	0 42	15 32
T 30	9 2	9 7	2 5	9 23	3 8	17 39	0 31	19 46	6 34	5 39	1 33	5 19	2 19	12 29	0 42	15 32
W31	8n40	4s19	3s16	9n50	2s51	17n21	0n33	19s48	6s31	5n38	1s33	5s21	2n18	12n28	0n42	15s32

Julian Day Number = 2498873.5, Delta T = 108.71 sec  
 Ecliptic obliquity = 23°25'14, Nutation = - 0°00'10, out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°33'03, Lahiri = 25°40'04

ASTRODIENST EPHEMERIS for the year 2129  
geocentric

SEPTEMBER 2129

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 40 54	8♍40'47	11♍25	26°R37	14♍30	23°R22	17°R56	19♍15	29♍5	18♍5	2♍48	18°R18	17♍11	19♍20	13°R 0	T 1
F 2	22 44 50	9°38'47	25°46	26♍22	15°44	23°R 9	17♍52	19°21	29°9	18°6	2°R48	18♍16	17°8	19°27	12♍59	F 2
S 3	22 48 47	10°36'48	9♍41	26°D16	16°57	22°58	17°47	19°27	29°13	18°7	2°48	18°13	17°5	19°34	12°58	S 3
S 4	22 52 43	11°34'51	23°7	26°17	18°10	22°47	17°42	19°33	29°16	18°8	2°48	18°11	17°1	19°40	12°57	S 4
M 5	22 56 40	12°32'56	6♍11	26°28	19°23	22°37	17°37	19°39	29°20	18°9	2°47	18°10	16°58	19°47	12°56	M 5
T 6	23 0 37	13°31'03	18°44	26°46	20°37	22°27	17°31	19°46	29°24	18°10	2°47	18°D10	16°55	19°54	12°55	T 6
W 7	23 4 33	14°29'12	1♍2	27°14	21°50	22°18	17°26	19°52	29°27	18°11	2°47	18°11	16°52	20°0	12°54	W 7
T 8	23 8 30	15°27'23	13°5	27°49	23°4	22°10	17°20	19°59	29°31	18°13	2°47	18°12	16°49	20°7	12°52	T 8
F 9	23 12 26	16°25'36	24°58	28°33	24°17	22°2	17°14	20°5	29°35	18°14	2°47	18°14	16°45	20°14	12°51	F 9
S 10	23 16 23	17°23'51	6♍46	29°25	25°31	21°55	17°9	20°12	29°38	18°15	2°47	18°15	16°42	20°20	12°50	S 10
S 11	23 20 19	18°22'08	18°33	0♍24	26°44	21°49	17°2	20°18	29°42	18°16	2°47	18°R16	16°39	20°27	12°49	S 11
M12	23 24 16	19°20'26	0♍21	1°30	27°58	21°44	16°56	20°25	29°45	18°18	2°46	18°15	16°36	20°33	12°47	M12
T 13	23 28 12	20°18'47	12°14	2°43	29°12	21°39	16°50	20°31	29°49	18°19	2°46	18°13	16°33	20°40	12°46	T 13
W14	23 32 9	21°17'09	24°14	4°2	0♍26	21°35	16°43	20°38	29°53	18°21	2°46	18°9	16°30	20°47	12°44	W14
T 15	23 36 6	22°15'33	6♍22	5°26	1°39	21°32	16°37	20°45	29°56	18°22	2°46	18°4	16°26	20°53	12°43	T 15
F 16	23 40 2	23°13'59	18°41	6°56	2°53	21°30	16°30	20°51	29°59	18°23	2°45	17°58	16°23	21°0	12°41	F 16
S 17	23 43 59	24°12'27	1♍11	8°29	4°7	21°28	16°23	20°58	0♍3	18°25	2°45	17°52	16°20	21°7	12°39	S 17
S 18	23 47 55	25°10'56	13°53	10°6	5°21	21°D28	16°16	21°5	0°7	18°26	2°45	17°46	16°17	21°13	12°38	S 18
M19	23 51 52	26°9'27	26°49	11°47	6°35	21°28	16°9	21°12	0°10	18°28	2°44	17°41	16°14	21°20	12°36	M19
T 20	23 55 48	27°8'00	10♍0	13°30	7°49	21°29	16°2	21°19	0°14	18°29	2°44	17°38	16°10	21°27	12°34	T 20
W21	23 59 45	28°6'34	23°28	15°15	9°3	21°31	15°55	21°26	0°17	18°31	2°44	17°D37	16°7	21°33	12°32	W21
T 22	0 3 41	29°5'10	7♍13	17°2	10°17	21°34	15°47	21°33	0°20	18°33	2°43	17°37	16°4	21°40	12°30	T 22
F 23	0 7 38	0♍3'48	21°18	18°51	11°31	21°37	15°40	21°40	0°24	18°34	2°43	17°38	16°1	21°47	12°28	F 23
S 24	0 11 35	1°2'27	5♍40	20°40	12°45	21°41	15°32	21°47	0°27	18°36	2°42	17°39	15°58	21°53	12°26	S 24
S 25	0 15 31	2°1'08	20°18	22°30	14°0	21°47	15°25	21°54	0°31	18°38	2°42	17°R39	15°55	22°0	12°24	S 25
M26	0 19 28	2°59'51	5♍7	24°20	15°14	21°52	15°17	22°1	0°34	18°39	2°42	17°38	15°51	22°6	12°22	M26
T 27	0 23 24	3°58'35	20°1	26°11	16°28	21°59	15°9	22°8	0°37	18°41	2°41	17°35	15°48	22°13	12°20	T 27
W28	0 27 21	4°57'21	4♍53	28°1	17°42	22°6	15°2	22°15	0°40	18°43	2°41	17°30	15°45	22°20	12°18	W28
T 29	0 31 17	5°56'09	19°33	29°52	18°57	22°15	14°54	22°22	0°44	18°44	2°40	17°22	15°42	22°26	12°16	T 29
F 30	0 35 14	6♍55'00	3♍55	1♍42	20♍11	22°R23	14°Y46	22♍29	0♍47	18♍46	2♍39	17♍15	15♍39	22♍33	12♍14	F 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8n19	0n38	4s13	10n14	2s33	17n 2	0n36	19s50	6s29	5n36	1s33	5s24	2n18	12n27	0n42	T 1
F 2	7 57	5 25	4 52	10 37	2 14	16 43	0 38	19 51	6 26	5 34	1 33	5 26	2 18	12 25	0 42	F 2
S 3	7 35	9 46	5 12	10 57	1 55	16 23	0 41	19 52	6 23	5 32	1 34	5 28	2 18	12 24	0 42	S 3
S 4	7 13	13 28	5 14	11 14	1 36	16 3	0 43	19 53	6 20	5 30	1 34	5 31	2 18	12 23	0 42	S 4
M 5	6 51	16 23	5 0	11 28	1 18	15 43	0 45	19 53	6 16	5 27	1 34	5 33	2 18	12 22	0 42	M 5
T 6	6 29	18 26	4 32	11 39	0 59	15 21	0 47	19 53	6 13	5 25	1 34	5 36	2 18	12 20	0 42	T 6
W 7	6 6	19 34	3 51	11 46	0 42	15 0	0 50	19 53	6 10	5 23	1 35	5 38	2 18	12 19	0 42	W 7
T 8	5 44	19 46	3 2	11 50	0 25	14 38	0 52	19 52	6 6	5 21	1 35	5 41	2 17	12 18	0 42	T 8
F 9	5 21	19 5	2 5	11 50	0 8	14 16	0 54	19 51	6 2	5 18	1 35	5 43	2 17	12 16	0 42	F 9
S 10	4 59	17 33	1 3	11 47	0n 7	13 53	0 56	19 50	5 58	5 16	1 35	5 46	2 17	12 15	0 42	S 10
S 11	4 36	15 17	0n 2	11 39	0 21	13 30	0 58	19 48	5 54	5 13	1 35	5 49	2 17	12 14	0 42	S 11
M12	4 13	12 22	1 6	11 28	0 35	13 6	1 0	19 46	5 50	5 11	1 35	5 51	2 17	12 13	0 42	M12
T 13	3 50	8 56	2 8	11 14	0 47	12 42	1 2	19 44	5 46	5 8	1 36	5 54	2 17	12 11	0 42	T 13
W14	3 27	5 6	3 4	10 56	0 58	12 18	1 3	19 41	5 42	5 6	1 36	5 56	2 17	12 10	0 43	W14
T 15	3 4	1 2	3 53	10 34	1 8	11 54	1 5	19 38	5 38	5 3	1 36	5 59	2 17	12 9	0 43	T 15
F 16	2 41	3s 7	4 32	10 10	1 17	11 29	1 7	19 35	5 34	5 0	1 36	6 1	2 17	12 8	0 43	F 16
S 17	2 18	7 13	4 58	9 42	1 25	11 3	1 9	19 31	5 29	4 58	1 36	6 4	2 17	12 7	0 43	S 17
S 18	1 55	11 3	5 10	9 11	1 32	10 38	1 10	19 27	5 25	4 55	1 36	6 7	2 16	12 5	0 43	S 18
M19	1 32	14 27	5 7	8 38	1 37	10 12	1 12	19 23	5 20	4 52	1 36	6 9	2 16	12 4	0 43	M19
T 20	1 8	17 11	4 48	8 3	1 42	9 46	1 13	19 19	5 16	4 49	1 37	6 12	2 16	12 3	0 43	T 20
W21	0 45	19 4	4 12	7 26	1 46	9 19	1 15	19 14	5 11	4 46	1 37	6 15	2 16	12 2	0 43	W21
T 22	0 22	19 52	3 22	6 46	1 48	8 53	1 16	19 9	5 7	4 43	1 37	6 17	2 16	12 1	0 43	T 22
F 23	0s 2	19 28	2 18	6 6	1 50	8 26	1 17	19 3	5 2	4 40	1 37	6 20	2 16	11 59	0 43	F 23
S 24	0 25	17 48	1 5	5 24	1 51	7 58	1 18	18 58	4 58	4 37	1 37	6 23	2 16	11 58	0 43	S 24
S 25	0 48	14 56	0s14	4 40	1 51	7 31	1 20	18 52	4 53	4 34	1 37	6 25	2 16	11 57	0 43	S 25
M26	1 11	11 4	1 33	3 56	1 50	7 3	1 21	18 45	4 49	4 31	1 37	6 28	2 16	11 56	0 43	M26
T 27	1 35	6 30	2 46	3 11	1 49	6 35	1 22	18 39	4 44	4 28	1 37	6 31	2 16	11 55	0 43	T 27
W28	1 58	1 32	3 47	2 25	1 47	6 7	1 23	18 32	4 40	4 25	1 37	6 33	2 16	11 54	0 43	W28
T 29	2 21	3n26	4 32	1 39	1 44	5 39	1 23	18 25	4 35	4 22	1 37	6 36	2 16	11 52	0 43	T 29
F 30	2s45	8n 7	4s59	0n53	1n41	5n11	1n24	18s18	4s31	4n19	1s37	6s39	2n16	11n51	0n43	F 30

Julian Day Number = 2498904.5, Delta T = 108.76 sec

Ecliptic obliquity = 23°25'14, Nutation = - 0°00'11, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 26°33'07, Lahiri = 25°40'08

# ASTRODIENST EPHEMERIS for the year 2129

## geocentric

OCTOBER 2129

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 39 10	7♂53'52	17♂53	3♂31	21♂25	22♂33	14°R38	22♂36	0♂50	18♂48	2°R39	17°R 7	15♂36	22♂40	12°R11	S 1
S 2	0 43 7	8°52'47	1♂24	5°20	22°40	22°43	14°V30	22°43	0°53	18°50	2♂38	17♂0 0	15°32	22°46	12♂9	S 2
M 3	0 47 3	9°51'44	14°28	7° 8	23°54	22°54	14°22	22°50	0°56	18°52	2°38	16°55	15°29	22°53	12° 7	M 3
T 4	0 51 0	10°50'43	27° 7	8°56	25° 9	23° 6	14°14	22°58	0°59	18°53	2°37	16°52	15°26	23° 0	12° 4	T 4
W 5	0 54 57	11°49'45	9♂26	10°42	26°23	23°18	14° 6	23° 5	1° 2	18°55	2°36	16°D51	15°23	23° 6	12° 2	W 5
T 6	0 58 53	12°48'49	21°29	12°28	27°38	23°32	13°58	23°12	1° 6	18°57	2°36	16°51	15°20	23°13	11°59	T 6
F 7	1 2 50	13°47'55	3♂22	14°14	28°53	23°45	13°50	23°19	1° 9	18°59	2°35	16°52	15°16	23°20	11°57	F 7
S 8	1 6 46	14°47'03	15° 9	15°58	0♂ 7	24° 0	13°42	23°26	1°11	19° 1	2°34	16°R52	15°13	23°26	11°54	S 8
S 9	1 10 43	15°46'14	26°57	17°42	1°22	24°15	13°34	23°34	1°14	19° 3	2°34	16°52	15°10	23°33	11°52	S 9
M10	1 14 39	16°45'27	8♂48	19°25	2°37	24°30	13°25	23°41	1°17	19° 5	2°33	16°49	15° 7	23°39	11°49	M10
T 11	1 18 36	17°44'42	20°47	21° 7	3°51	24°47	13°17	23°48	1°20	19° 7	2°32	16°44	15° 4	23°46	11°47	T 11
W12	1 22 32	18°43'59	2♂58	22°49	5° 6	25° 4	13° 9	23°56	1°23	19° 9	2°31	16°37	15° 1	23°53	11°44	W12
T 13	1 26 29	19°43'18	15°20	24°29	6°21	25°21	13° 1	24° 3	1°26	19°11	2°31	16°27	14°57	23°59	11°41	T 13
F 14	1 30 26	20°42'39	27°56	26° 9	7°36	25°39	12°53	24°10	1°29	19°13	2°30	16°15	14°54	24° 6	11°39	F 14
S 15	1 34 22	21°42'03	10♂45	27°48	8°51	25°58	12°46	24°17	1°31	19°15	2°29	16° 3	14°51	24°13	11°36	S 15
S 16	1 38 19	22°41'28	23°47	29°27	10° 6	26°17	12°38	24°25	1°34	19°17	2°28	15°52	14°48	24°19	11°33	S 16
M17	1 42 15	23°40'55	7♂ 0	1♂ 4	11°20	26°37	12°30	24°32	1°37	19°19	2°27	15°43	14°45	24°26	11°30	M17
T 18	1 46 12	24°40'24	20°25	2°41	12°35	26°57	12°22	24°39	1°39	19°21	2°27	15°36	14°41	24°33	11°28	T 18
W19	1 50 8	25°39'55	4♂ 0	4°18	13°50	27°18	12°15	24°47	1°42	19°23	2°26	15°31	14°38	24°39	11°25	W19
T 20	1 54 5	26°39'28	17°46	5°53	15° 5	27°40	12° 7	24°54	1°44	19°25	2°25	15°30	14°35	24°46	11°22	T 20
F 21	1 58 1	27°39'02	1♂43	7°28	16°20	28° 2	11°59	25° 1	1°47	19°27	2°24	15°D29	14°32	24°53	11°19	F 21
S 22	2 1 58	28°38'38	15°50	9° 3	17°35	28°24	11°52	25° 9	1°49	19°29	2°23	15°R30	14°29	24°59	11°16	S 22
S 23	2 5 55	29°38'16	0♂ 8	10°37	18°50	28°47	11°45	25°16	1°52	19°32	2°22	15°29	14°26	25° 6	11°13	S 23
M24	2 9 51	0♂37'55	14°33	12°10	20° 5	29°10	11°38	25°23	1°54	19°34	2°21	15°26	14°22	25°13	11°11	M24
T 25	2 13 48	1°37'36	29° 3	13°43	21°20	29°34	11°30	25°31	1°56	19°36	2°20	15°21	14°19	25°19	11° 8	T 25
W26	2 17 44	2°37'19	13°V32	15°15	22°35	29°58	11°23	25°38	1°59	19°38	2°19	15°13	14°16	25°26	11° 5	W26
T 27	2 21 41	3°37'03	27°54	16°46	23°50	0♂23	11°17	25°45	2° 1	19°40	2°18	15° 2	14°13	25°32	11° 2	T 27
F 28	2 25 37	4°36'50	12♂ 2	18°17	25° 6	0°48	11°10	25°52	2° 3	19°42	2°17	14°50	14°10	25°39	10°59	F 28
S 29	2 29 34	5°36'39	25°52	19°48	26°21	1°13	11° 3	26° 0	2° 5	19°45	2°16	14°38	14° 7	25°46	10°56	S 29
S 30	2 33 30	6°36'29	9♂19	21°17	27°36	1°39	10°57	26° 7	2° 7	19°47	2°15	14°27	14° 3	25°52	10°53	S 30
M31	2 37 27	7♂36'22	22♂22	22♂47	28♂51	2♂ 5	10°V50	26♂14	2♂ 9	19♂49	2♂14	14♂18	14♂0 0	25♂59	10♂50	M31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	3s 8	12n13	5s 7	0n 6	1n38	4n42	1n25	18s11	4s26	4n16	1s37	6s41	2n16	11n50	0n43	15s46	1n42	7n24	13s31	15n42	16n 9	14n33	14n18	1s14	
S 2	3 31	15 34	4 58	0s41	1 34	4 13	1 26	18 3	4 22	4 13	1 37	6 44	2 15	11 49	0 43	15 46	1 42	7 23	13 31	15 44	16 10	14 32	14 18	1 14	
M 3	3 54	18 0	4 33	1 27	1 30	3 44	1 26	17 55	4 17	4 10	1 37	6 47	2 15	11 48	0 43	15 47	1 42	7 23	13 32	15 45	16 11	14 30	14 17	1 14	
T 4	4 17	19 28	3 55	2 14	1 25	3 15	1 27	17 47	4 13	4 7	1 37	6 49	2 15	11 47	0 43	15 47	1 42	7 23	13 32	15 46	16 12	14 29	14 16	1 14	
W 5	4 40	19 58	3 7	3 0	1 20	2 46	1 27	17 39	4 8	4 4	1 37	6 52	2 15	11 46	0 43	15 48	1 42	7 23	13 32	15 47	16 13	14 28	14 15	1 15	
T 6	5 3	19 32	2 12	3 47	1 15	2 17	1 28	17 30	4 4	4 0	1 37	6 55	2 15	11 45	0 43	15 48	1 42	7 22	13 32	15 46	16 14	14 26	14 14	1 15	
F 7	5 26	18 13	1 12	4 33	1 9	1 48	1 28	17 22	4 0	3 57	1 37	6 57	2 15	11 44	0 43	15 49	1 42	7 22	13 32	15 46	16 15	14 25	14 13	1 15	
S 8	5 49	16 8	0 9	5 18	1 3	1 18	1 28	17 13	3 55	3 54	1 37	7 0	2 15	11 43	0 43	15 50	1 42	7 22	13 33	15 46	16 16	14 24	14 12	1 15	
S 9	6 12	13 22	0n54	6 3	0 57	0 49	1 29	17 4	3 51	3 51	1 37	7 3	2 15	11 42	0 43	15 50	1 42	7 21	13 33	15 46	16 16	14 22	14 12	1 15	
M10	6 35	10 2	1 55	6 48	0 51	0 19	1 29	16 54	3 47	3 48	1 37	7 5	2 15	11 41	0 43	15 51	1 42	7 21	13 33	15 47	16 17	14 21	14 11	1 15	
T 11	6 57	6 16	2 51	7 32	0 45	0s10	1 29	16 45	3 43	3 45	1 37	7 8	2 15	11 40	0 43	15 51	1 42	7 21	13 33	15 48	16 18	14 19	14 10	1 15	
W12	7 20	2 12	3 40	8 16	0 39	0 40	1 29	16 35	3 38	3 42	1 37	7 11	2 15	11 39	0 43	15 52	1 42	7 20	13 33	15 51	16 19	14 18	14 9	1 15	
T 13	7 42	2s 2	4 20	8 59	0 32	1 10	1 29	16 25	3 34	3 39	1 37	7 14	2 15	11 38	0 43	15 52	1 42	7 20	13 33	15 54	16 20	14 17	14 8	1 16	
F 14	8 5	6 15	4 48	9 42	0 25	1 39	1 29	16 15	3 30	3 36	1 37	7 16	2 15	11 37	0 43	15 53	1 42	7 20	13 34	15 57	16 21	14 15	14 7	1 16	
S 15	8 27	10 15	5 1	10 24	0 19	2 9	1 28	16 5	3 26	3 33	1 37	7 19	2 15	11 36	0 43	15 53	1 42	7 19	13 34	16 1	16 22	14 14	14 6	1 16	
S 16	8 49	13 51	5 0	11 5	0 12	2 39	1 28	15 54	3 22	3 30	1 37	7 22	2 15	11 35	0 43	15 54	1 42	7 19	13 34	16 4	16 23	14 13	14 5	1 16	
M17	9 11	16 49	4 42	11 45	0 5	3 8	1 28	15 44	3 18	3 27	1 37	7 24	2 15	11 34	0 43	15 55	1 42	7 19	13 34	16 7	16 24	14 11	14 4	1 16	
T 18	9 33	18 56	4 9	12 25	0s 2	3 38	1 27	15 33	3 14	3 24	1 37	7 27	2 15	11 33	0 43	15 55	1 42	7 19	13 34	16 9	16 25	14 10	14 3	1 16	
W19	9 55	20 0	3 22	13 5	0 9	4 7	1 27	15 22	3 10	3 21	1 37	7 30	2 15	11 32	0 43	15 56	1 42	7 18	13 34	16 10	16 26	14 8	14 2	1 16	
T 20	10 16	19 54	2 22	13 43	0 15	4 37	1 26	15 11	3 6	3 18	1 37	7 32	2 15	11 31	0 43	15 56	1 42	7 18	13 35	16 11	16 27	14 7	14 1	1 16	
F 21	10 38	18 35	1 13	14 21	0 22	5 6	1 26	15 0	3 2	3 15	1 36	7 35	2 15	11 31	0 43	15 57	1 42	7 18	13 35	16 11	16 28	14 6	14 0	1 16	
S 22	10 59	16 6	0s 2	14 58	0 29	5 35	1 25	14 49	2 58	3 13	1 36	7 37	2 15	11 30	0 44	15 58	1 42	7 17	13 35	16 11	16 29	14 4	13 59	1 16	
S 23	11 20	12 37	1 17	15 34	0 36	6 4	1 24	14 37	2 55	3 10	1 36	7 40	2 15	11 29	0 44	15 58	1 42	7 17	13 35	16 11	16 29	14 3	13 58	1 17	
M24	11 41	8 21	2 28	16 9	0 43	6 33	1 24	14 25	2 51	3 7	1 36	7 43	2 15	11 28	0 44	15 59	1 42	7 17	13 35	16 12	16 30	14 1	13 57	1 17	
T 25	12 2	3 34	3 29	16 44	0 49	7 2	1 23	14 14	2 47	3 5	1 36	7 45	2 15	11 27	0 44	15 59	1 42	7 17	13 35	16 13	16 31	14 0	13 56	1 17	
W26	12 22	1n24	4 17	17 17	0 56	7 31	1 22	14 2	2 44	3 2	1 36	7 48	2 15	11 27	0 44	16 0	1 42	7 16	13 35	16 16	16 32	13 58	13 55	1 17	
T 27	12 43	6 14	4 48	17 50	1 3	8 0	1 21	13 50	2 40	2 59	1 36	7 51	2 15	11 26	0 44	16 1	1 42	7 16	13 35	16 19	16 33	13 57	13 54	1 17	
F 28	13 3	10 40	5 1	18 22	1 9	8 28	1 20	13 37	2 37	2 57	1 36	7 53	2 15	11 25	0 44	16 1	1 41	7 16	13 35	16 22	16 34	13 56	13 53	1 17	
S 29	13 23	14 25	4 55	18 53	1 15	8 56	1 19	13 25	2 33	2 54	1 35	7 56	2 15	11 24	0 44	16 2	1 41	7 15	13 36	16 26	16 35	13 54	13 52	1 17	
S 30	13 43	17 19	4 33	19 23	1 22	9 24	1 17	13 12	2 30	2 52	1 35	7 58	2 15	11 24	0 44	16 2	1 41	7 15	13 36	16 29	16 36	13 53	13 51	1 17	
M31	14s 2	19n15	3s58	19s52	1s28	9s52	1n16	13s 0	2s26	2n50	1s35	8s 1	2n15	11n23	0n44	16s 3	1n41	7n15	13s36	16n32	16n37	13n51	13n50	1s17	

ASTRODIENST EPHEMERIS for the year 2129  
geocentric

NOVEMBER 2129

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	2 41 24	8♈36'17	5♉ 3	24♈16	0♈ 6	2♈32	10°R44	26♈21	2♈11	19♈51	2°R13	14°R11	13♈57	26♈ 6	10°R47	T 1
W 2	2 45 20	9°36'14	17°23	25°44	1°21	2°59	10°Y38	26°28	2°13	19°53	2♈12	14° 8	13°54	26°12	10♈44	W 2
T 3	2 49 17	10°36'14	29°27	27°11	2°37	3°26	10°32	26°36	2°15	19°56	2°11	14° 6	13°51	26°19	10°41	T 3
F 4	2 53 13	11°36'15	11♈20	28°38	3°52	3°54	10°26	26°43	2°17	19°58	2°10	14° 6	13°47	26°26	10°38	F 4
S 5	2 57 10	12°36'18	23° 8	0♈ 5	5° 7	4°22	10°20	26°50	2°19	20° 0	2° 9	14° 6	13°44	26°32	10°35	S 5
S 6	3 1 6	13°36'24	4♈57	1°31	6°22	4°50	10°15	26°57	2°21	20° 2	2° 8	14° 5	13°41	26°39	10°32	S 6
M 7	3 5 3	14°36'32	16°51	2°56	7°38	5°19	10° 9	27° 4	2°23	20° 5	2° 7	14° 2	13°38	26°46	10°29	M 7
T 8	3 8 59	15°36'41	28°55	4°20	8°53	5°48	10° 4	27°11	2°24	20° 7	2° 6	13°56	13°35	26°52	10°26	T 8
W 9	3 12 56	16°36'53	11♈13	5°44	10° 8	6°17	9°59	27°18	2°26	20° 9	2° 5	13°47	13°32	26°59	10°23	W 9
T 10	3 16 53	17°37'06	23°48	7° 7	11°23	6°47	9°54	27°25	2°27	20°11	2° 4	13°36	13°28	27° 6	10°21	T 10
F 11	3 20 49	18°37'22	6♈40	8°29	12°39	7°17	9°50	27°32	2°29	20°14	2° 3	13°23	13°25	27°12	10°18	F 11
S 12	3 24 46	19°37'39	19°50	9°50	13°54	7°47	9°45	27°39	2°30	20°16	2° 2	13°10	13°22	27°19	10°15	S 12
S 13	3 28 42	20°37'58	3♈15	11° 9	15° 9	8°17	9°41	27°46	2°32	20°18	2° 1	12°57	13°19	27°25	10°12	S 13
M14	3 32 39	21°38'19	16°53	12°28	16°25	8°48	9°37	27°53	2°33	20°20	1°59	12°46	13°16	27°32	10° 9	M14
T 15	3 36 35	22°38'41	0♈42	13°45	17°40	9°19	9°33	28° 0	2°35	20°23	1°58	12°38	13°13	27°39	10° 6	T 15
W16	3 40 32	23°39'05	14°37	15° 1	18°56	9°50	9°29	28° 7	2°36	20°25	1°57	12°32	13° 9	27°45	10° 3	W16
T 17	3 44 28	24°39'30	28°36	16°15	20°11	10°22	9°25	28°14	2°37	20°27	1°56	12°30	13° 6	27°52	10° 0	T 17
F 18	3 48 25	25°39'56	12♈39	17°27	21°26	10°54	9°22	28°20	2°38	20°29	1°55	12°D29	13° 3	27°59	9°57	F 18
S 19	3 52 22	26°40'24	26°43	18°37	22°42	11°26	9°19	28°27	2°39	20°32	1°54	12°R29	13° 0	28° 5	9°55	S 19
S 20	3 56 18	27°40'53	10♈49	19°45	23°57	11°58	9°16	28°34	2°40	20°34	1°53	12°29	12°57	28°12	9°52	S 20
M21	4 0 15	28°41'23	24°55	20°50	25°12	12°30	9°13	28°41	2°41	20°36	1°52	12°26	12°53	28°19	9°49	M21
T 22	4 4 11	29°41'54	9♈ 1	21°51	26°28	13° 3	9°10	28°47	2°42	20°38	1°50	12°21	12°50	28°25	9°46	T 22
W23	4 8 8	0♈42'27	23° 2	22°49	27°43	13°36	9° 8	28°54	2°43	20°41	1°49	12°13	12°47	28°32	9°44	W23
T 24	4 12 4	1°43'01	6♈57	23°44	28°59	14° 9	9° 6	29° 0	2°44	20°43	1°48	12° 3	12°44	28°39	9°41	T 24
F 25	4 16 1	2°43'36	20°41	24°33	0♈14	14°42	9° 4	29° 7	2°45	20°45	1°47	11°52	12°41	28°45	9°38	F 25
S 26	4 19 57	3°44'13	4♈11	25°18	1°29	15°16	9° 2	29°13	2°45	20°47	1°46	11°40	12°38	28°52	9°36	S 26
S 27	4 23 54	4°44'51	17°23	25°56	2°45	15°49	9° 1	29°20	2°46	20°49	1°45	11°29	12°34	28°59	9°33	S 27
M28	4 27 51	5°45'31	0♈17	26°29	4° 0	16°23	8°59	29°26	2°47	20°52	1°44	11°20	12°31	29° 5	9°30	M28
T 29	4 31 47	6°46'12	12°52	26°53	5°16	16°57	8°58	29°33	2°47	20°54	1°43	11°13	12°28	29°12	9°28	T 29
W30	4 35 44	7♈46'54	25♈10	27♈10	6♈31	17♈32	8°Y57	29♈39	2♈48	20♈56	1♈41	11♈10	12♈25	29♈19	9♈25	W30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	14s22	20n 8	3s11	20s20	1s34	10s20	1n15	12s47	2s23	2n47	1s35	8s 3	2n16	11n22	0n44	16s 4	1n41	7n15	13s36	16n34	16n38	13n50	13n49	1s17			
W 2	14 41	20 2	2 17	20 47	1 40	10 47	1 14	12 34	2 19	2 45	1 35	8 6	2 16	11 22	0 44	16 4	1 41	7 14	13 36	16 35	16 39	13 48	13 48	1 18			
T 3	15 0	19 0	1 17	21 13	1 45	11 14	1 12	12 21	2 16	2 43	1 34	8 8	2 16	11 21	0 44	16 5	1 41	7 14	13 36	16 35	16 40	13 47	13 47	1 18			
F 4	15 18	17 8	0 15	21 38	1 51	11 41	1 11	12 8	2 13	2 41	1 34	8 11	2 16	11 20	0 44	16 5	1 41	7 14	13 36	16 35	16 40	13 46	13 46	1 18			
S 5	15 37	14 33	0n48	22 2	1 56	12 8	1 9	11 55	2 10	2 39	1 34	8 13	2 16	11 20	0 44	16 6	1 41	7 14	13 36	16 35	16 41	13 44	13 45	1 18			
S 6	15 55	11 22	1 48	22 25	2 1	12 34	1 8	11 42	2 7	2 37	1 34	8 16	2 16	11 19	0 44	16 7	1 41	7 13	13 36	16 36	16 42	13 43	13 44	1 18			
M 7	16 13	7 43	2 44	22 47	2 6	13 0	1 6	11 28	2 3	2 35	1 34	8 18	2 16	11 18	0 44	16 7	1 41	7 13	13 36	16 36	16 43	13 41	13 43	1 18			
T 8	16 30	3 42	3 34	23 8	2 10	13 26	1 5	11 15	2 0	2 33	1 33	8 21	2 16	11 18	0 44	16 8	1 41	7 13	13 36	16 38	16 44	13 40	13 42	1 18			
W 9	16 47	0s32	4 14	23 27	2 15	13 51	1 3	11 1	1 57	2 31	1 33	8 23	2 16	11 17	0 44	16 8	1 41	7 13	13 36	16 41	16 45	13 38	13 41	1 18			
T 10	17 4	4 51	4 43	23 45	2 19	14 16	1 1	10 47	1 54	2 30	1 33	8 26	2 16	11 17	0 44	16 9	1 41	7 12	13 36	16 44	16 46	13 37	13 40	1 18			
F 11	17 21	9 2	4 58	24 3	2 22	14 41	1 0	10 33	1 51	2 28	1 33	8 28	2 16	11 16	0 44	16 10	1 41	7 12	13 36	16 47	16 47	13 35	13 39	1 18			
S 12	17 38	12 53	4 58	24 18	2 26	15 5	0 58	10 19	1 48	2 27	1 32	8 31	2 16	11 16	0 44	16 10	1 41	7 12	13 37	16 51	16 48	13 34	13 38	1 18			
S 13	17 54	16 10	4 42	24 33	2 29	15 29	0 56	10 5	1 45	2 25	1 32	8 33	2 16	11 15	0 44	16 11	1 41	7 12	13 37	16 55	16 49	13 32	13 37	1 18			
M14	18 10	18 38	4 9	24 46	2 31	15 52	0 54	9 51	1 43	2 24	1 32	8 35	2 16	11 15	0 44	16 11	1 41	7 11	13 37	16 58	16 50	13 31	13 36	1 18			
T 15	18 25	20 3	3 22	24 58	2 33	16 15	0 52	9 37	1 40	2 22	1 32	8 38	2 16	11 14	0 44	16 12	1 41	7 11	13 37	17 0	16 50	13 29	13 35	1 19			
W16	18 40	20 16	2 22	25 9	2 35	16 38	0 50	9 22	1 37	2 21	1 31	8 40	2 17	11 14	0 45	16 13	1 41	7 11	13 37	17 2	16 51	13 28	13 35	1 19			
T 17	18 55	19 14	1 13	25 18	2 36	17 0	0 48	9 8	1 34	2 20	1 31	8 42	2 17	11 14	0 45	16 13	1 41	7 11	13 37	17 2	16 52	13 26	13 34	1 19			
F 18	19 10	17 1	0s1	25 26	2 37	17 22	0 46	8 53	1 32	2 19	1 31	8 45	2 17	11 13	0 45	16 14	1 41	7 11	13 37	17 3	16 53	13 25	13 33	1 19			
S 19	19 24	13 46	1 15	25 32	2 37	17 43	0 44	8 39	1 29	2 18	1 31	8 47	2 17	11 13	0 45	16 14	1 41	7 10	13 37	17 3	16 54	13 23	13 32	1 19			
S 20	19 38	9 44	2 24	25 38	2 36	18 4	0 42	8 24	1 26	2 17	1 30	8 49	2 17	11 13	0 45	16 15	1 41	7 10	13 37	17 3	16 55	13 22	13 31	1 19			
M21	19 51	5 9	3 25	25 41	2 35	18 24	0 40	8 9	1 24	2 16	1 30	8 52	2 17	11 12	0 45	16 15	1 41	7 10	13 37	17 3	16 56	13 20	13 30	1 19			
T 22	20 4	0 18	4 13	25 43	2 33	18 44	0 38	7 54	1 21	2 15	1 30	8 54	2 17	11 12	0 45	16 16	1 41	7 10	13 37	17 5	16 57	13 19	13 29	1 19			
W23	20 17	4n31	4 46	25 44	2 31	19 4	0 35	7 39	1 19	2 15	1 30	8 56	2 17	11 12	0 45	16 17	1 41	7 10	13 37	17 7	16 58	13 17	13 28	1 19			
T 24	20 29	9 5	5 1	25 43	2 27	19 22	0 33	7 24	1 16	2 14	1 29	8 58	2 17	11 11	0 45	16 17	1 41	7 9	13 37	17 10	16 59	13 16	13 27	1 19			
F 25	20 41	13 6	4 59	25 41	2 22	19 41	0 31	7 9	1 14	2 14	1 29	9 0	2 18	11 11	0 45	16 18	1 41	7 9	13 36	17 13	16 59	13 14	13 26	1 19			
S 26	20 53	16 23	4 39	25 37	2 17	19 58	0 29	6 54	1 11	2 13	1 29	9 3	2 18	11 11	0 45	16 18	1 41	7 9	13 36	17 16	17 0	13 13	13 25	1 19			
S 27	21 4	18 45	4 6	25 31	2 10	20 16	0 26	6 39	1 9	2 13	1 28	9 5	2 18	11 11	0 45	16 19	1 41	7 9	13 36	17 19	17 1	13 11	13 24	1 19			
M28	21 15	20 5	3 20	25 24	2 2	20 32	0 24	6 23	1 7	2 13	1 28	9 7	2 18	11 11	0 45	16 19	1 41	7 9	13 36	17 22	17 2	13 10	13 24	1 19			
T 29	21 25	20 24	2 25	25 16	1 53	20 48	0 22	6 8	1 4	2 12	1 28	9 9	2 18	11 10	0 45	16 20	1 41	7 9	13 36	17 24	17 3	13 8	13 23	1 19			
W30	21s35	19n42	1s24	25s 6	1s42	21s 4	0n20	5s53	1s 2	2n12	1s28	9s11	2n18	11n10	0n45	16s21	1n42	7n 8	13s36	17n25	17n 4	13n 7	13n22	1s19			

# ASTRODIENST EPHEMERIS for the year 2129

## geocentric

DECEMBER 2129

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4 39 40	8°47'38	7°13	27°R18	7°47	18°46	8°R56	29°45	2°48	20°M58	1°R40	11°D 8	12°12	29°125	9°R23	T 1
F 2	4 43 37	9°48'23	19° 7	27°17	9° 2	18°40	8°Y56	29°51	2°49	21° 0	1°H39	11°12	12°19	29°32	9°R20	F 2
S 3	4 47 33	10°49'10	0°15	27° 5	10°18	19°15	8°56	29°57	2°49	21° 2	1°38	11° 9	12°15	29°38	9°18	S 3
S 4	4 51 30	11°49'59	12°44	26°42	11°33	19°50	8°D55	0°M 3	2°49	21° 5	1°37	11°R10	12°12	29°45	9°15	S 4
M 5	4 55 26	12°50'48	24°38	26° 8	12°48	20°25	8°56	0°10	2°49	21° 7	1°36	11° 9	12° 9	29°52	9°13	M 5
T 6	4 59 23	13°51'39	6°43	25°23	14° 4	21° 0	8°56	0°15	2°49	21° 9	1°35	11° 6	12° 6	29°58	9°11	T 6
W 7	5 3 20	14°52'32	19° 4	24°27	15°19	21°35	8°56	0°21	2°50	21°11	1°34	11° 1	12° 3	0°M 5	9° 9	W 7
T 8	5 7 16	15°53'25	1°M44	23°22	16°35	22°11	8°57	0°27	2°R50	21°13	1°33	10°53	11°59	0°12	9° 6	T 8
F 9	5 11 13	16°54'20	14°46	22° 9	17°50	22°46	8°58	0°33	2°50	21°15	1°32	10°44	11°56	0°18	9° 4	F 9
S 10	5 15 9	17°55'17	28°10	20°50	19° 6	23°22	8°59	0°39	2°50	21°17	1°30	10°35	11°53	0°25	9° 2	S 10
S 11	5 19 6	18°56'14	11°15	19°28	20°21	23°58	9° 1	0°44	2°49	21°19	1°29	10°26	11°50	0°32	9° 0	S 11
M12	5 23 2	19°57'12	25°58	18° 5	21°37	24°34	9° 2	0°50	2°49	21°21	1°28	10°18	11°47	0°38	8°58	M12
T 13	5 26 59	20°58'12	10°13	16°44	22°52	25°10	9° 4	0°56	2°49	21°23	1°27	10°12	11°44	0°45	8°56	T 13
W14	5 30 55	21°59'12	24°35	15°28	24° 8	25°46	9° 6	1° 1	2°49	21°25	1°26	10° 8	11°40	0°52	8°54	W14
T 15	5 34 52	23° 0'12	9°18	14°20	25°23	26°22	9° 8	1° 7	2°48	21°27	1°25	10°D 7	11°37	0°58	8°52	T 15
F 16	5 38 49	24° 1'14	23°22	13°20	26°39	26°59	9°10	1°12	2°48	21°29	1°24	10° 8	11°34	1° 5	8°50	F 16
S 17	5 42 45	25° 2'15	7°13	12°30	27°54	27°35	9°13	1°17	2°47	21°31	1°23	10° 9	11°31	1°12	8°48	S 17
S 18	5 46 42	26° 3'17	21°47	11°52	29°10	28°12	9°16	1°22	2°47	21°33	1°22	10°R10	11°28	1°18	8°46	S 18
M19	5 50 38	27° 4'20	5°14	11°24	0°25	28°49	9°19	1°28	2°46	21°35	1°21	10°10	11°25	1°25	8°45	M19
T 20	5 54 35	28° 5'22	19°37	11° 8	1°41	29°26	9°22	1°33	2°46	21°37	1°20	10° 8	11°21	1°32	8°43	T 20
W21	5 58 31	29° 6'25	3°18	11°D 2	2°56	0°Y 2	9°25	1°38	2°45	21°39	1°19	10° 4	11°18	1°38	8°41	W21
T 22	6 2 28	0°37'29	16°47	11° 5	4°12	0°40	9°29	1°43	2°44	21°41	1°18	9°58	11°15	1°45	8°40	T 22
F 23	6 6 24	1° 8'33	0°11	11°19	5°27	1°17	9°33	1°48	2°43	21°43	1°17	9°51	11°12	1°52	8°38	F 23
S 24	6 10 21	2° 9'37	13° 8	11°40	6°43	1°54	9°37	1°52	2°43	21°44	1°16	9°44	11° 9	1°58	8°37	S 24
S 25	6 14 18	3°10'41	25°59	12° 9	7°58	2°31	9°41	1°57	2°42	21°46	1°15	9°38	11° 5	2° 5	8°35	S 25
M26	6 18 14	4°11'47	8°36	12°45	9°13	3° 8	9°45	2° 2	2°41	21°48	1°14	9°33	11° 2	2°12	8°34	M26
T 27	6 22 11	5°12'52	20°59	13°27	10°29	3°46	9°50	2° 6	2°40	21°50	1°13	9°29	10°59	2°18	8°33	T 27
W28	6 26 7	6°13'58	3°10	14°14	11°44	4°23	9°54	2°11	2°39	21°52	1°12	9°28	10°56	2°25	8°31	W28
T 29	6 30 4	7°15'04	15°10	15° 7	13° 0	5° 1	9°59	2°15	2°38	21°53	1°12	9°D28	10°53	2°32	8°30	T 29
F 30	6 34 0	8°16'11	27° 2	16° 3	14°15	5°39	10° 4	2°19	2°37	21°55	1°11	9°29	10°50	2°38	8°29	F 30
S 31	6 37 57	9°17'18	8°15	17°13	15°31	6°16	10°Y10	2°M24	2°M35	21°M57	1°H10	9°13	10°12	2°M45	8°28	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	21s45	18n 7	0s21	24s54	1s30	21s18	0n17	5s37	1s 0	2n12	1s27	9s13	2n18	11n10	0n45	16s21
F 2	21 54	15 45	0n43	24 41	1 17	21 33	0 15	5 22	0 58	2 12	1 27	9 15	2 18	11 10	0 45	16 22
S 3	22 3	12 46	1 44	24 26	1 2	21 46	0 12	5 6	0 55	2 12	1 27	9 17	2 19	11 10	0 45	16 22
S 4	22 11	9 15	2 41	24 9	0 46	21 59	0 10	4 50	0 53	2 13	1 26	9 19	2 19	11 10	0 45	16 23
M 5	22 19	5 22	3 31	23 50	0 28	22 11	0 8	4 35	0 51	2 13	1 26	9 21	2 19	11 10	0 45	16 23
T 6	22 27	1 13	4 13	23 30	0 10	22 23	0 5	4 19	0 49	2 13	1 26	9 23	2 19	11 10	0 45	16 24
W 7	22 34	3s 4	4 44	23 8	0n10	22 34	0 3	4 3	0 47	2 14	1 25	9 25	2 19	11 10	0 45	16 24
T 8	22 40	7 20	5 2	22 45	0 30	22 44	0 0	3 47	0 45	2 14	1 25	9 27	2 19	11 10	0 46	16 25
F 9	22 47	11 23	5 5	22 21	0 50	22 54	0s 2	3 31	0 43	2 15	1 25	9 29	2 20	11 10	0 46	16 25
S 10	22 52	14 59	4 52	21 56	1 10	23 3	0 4	3 15	0 41	2 16	1 25	9 30	2 20	11 10	0 46	16 26
S 11	22 58	17 53	4 22	21 31	1 30	23 11	0 7	2 59	0 39	2 17	1 24	9 32	2 20	11 10	0 46	16 26
M12	23 2	19 47	3 35	21 6	1 47	23 18	0 9	2 43	0 37	2 17	1 24	9 34	2 20	11 10	0 46	16 27
T 13	23 7	20 28	2 34	20 43	2 4	23 25	0 11	2 27	0 35	2 18	1 24	9 36	2 20	11 10	0 46	16 27
W14	23 11	19 50	1 23	20 21	2 18	23 31	0 14	2 11	0 33	2 20	1 23	9 37	2 20	11 11	0 46	16 28
T 15	23 14	17 54	0 6	20 2	2 30	23 37	0 16	1 55	0 31	2 21	1 23	9 39	2 21	11 11	0 46	16 28
F 16	23 17	14 50	1s11	19 45	2 39	23 41	0 19	1 39	0 30	2 22	1 23	9 41	2 21	11 11	0 46	16 29
S 17	23 20	10 55	2 23	19 32	2 46	23 45	0 21	1 23	0 28	2 23	1 22	9 42	2 21	11 11	0 46	16 29
S 18	23 22	6 25	3 26	19 22	2 51	23 48	0 23	1 7	0 26	2 24	1 22	9 44	2 21	11 11	0 46	16 30
M19	23 23	1 38	4 16	19 16	2 54	23 51	0 26	0 51	0 24	2 26	1 22	9 46	2 21	11 12	0 46	16 30
T 20	23 24	3n11	4 51	19 12	2 55	23 52	0 28	0 34	0 23	2 27	1 22	9 47	2 22	11 12	0 46	16 31
W21	23 25	7 46	5 8	19 12	2 54	23 53	0 30	0 18	0 21	2 29	1 21	9 49	2 22	11 12	0 46	16 31
T 22	23 25	11 55	5 8	19 15	2 52	23 54	0 32	0 2	0 19	2 31	1 21	9 50	2 22	11 12	0 46	16 32
F 23	23 25	15 24	4 51	19 20	2 49	23 53	0 35	0n14	0 18	2 32	1 21	9 52	2 22	11 13	0 46	16 32
S 24	23 24	18 4	4 19	19 27	2 44	23 52	0 37	0 31	0 16	2 34	1 20	9 53	2 22	11 13	0 46	16 32
S 25	23 23	19 47	3 35	19 37	2 39	23 50	0 39	0 47	0 14	2 36	1 20	9 55	2 23	11 13	0 46	16 33
M26	23 21	20 28	2 41	19 47	2 33	23 47	0 41	1 3	0 13	2 38	1 20	9 56	2 23	11 14	0 46	16 33
T 27	23 19	20 9	1 39	19 59	2 26	23 44	0 43	1 19	0 11	2 40	1 20	9 57	2 23	11 14	0 46	16 34
W28	23 16	18 53	0 34	20 12	2 19	23 39	0 45	1 36	0 10	2 42	1 19	9 59	2 23	11 15	0 46	16 34
T 29	23 13	16 46	0n31	20 25	2 11	23 34	0 47	1 52	0 8	2 44	1 19	10 0	2 23	11 15	0 46	16 35
F 30	23 10	13 59	1 35	20 39	2 3	23 29	0 50	2 8	0 7	2 47	1 19	10 1	2 24	11 16	0 46	16 35
S 31	23s 6	10n38	2n34	20s53	1n55	23s22	0s52	2n24	0s 5	2n49	1s18	10s 3	2n24	11n16	0n47	16s35

Julian Day Number = 2498995.5, Delta T = 108.91 sec  
 Ecliptic obliquity = 23°25'14", Nutation = - 0°00'14", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 26°33'20", Lahiri = 25°40'20"