



Astrodienst Ephemeris Tables for the year 1719

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 1719
geocentric

JANUARY 1719

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 40 6	10°3'50"	3°38'39"	24°30'20"	4°38'14"	18°18'24"	5°18'18"	11°18'24"	10°18'17"	15°18'38"	16°18'52"	8°18'49"	9°18'53"	19°18'30"	9°18'8"	S 1
M 2	6 44 2	11°6'39"	16°9'9"	25°54'5"	5°29'19"	19°3'5"	5°18'15"	11°29'10"	10°18'18"	15°18'37"	16°18'52"	8°18'43"	9°18'50"	19°18'37"	9°18'11"	M 2
T 3	6 47 59	12°7'48"	29°0'29"	27°28'6"	6°44'19"	19°42'5"	5°13'11"	11°34'10"	10°19'15"	15°36'16"	16°51'8°36'	9°47'19°43'	9°44'19°50'	9°16'19°57'	9°18'9°21'	T 3
W 4	6 51 55	13°8'57"	12°11'5"	29°1'8°0'	20°21'5°11'	11°38'10°19'	15°35'16°51'	8°27'9°44'	19°50'9°16'	W 4						
T 5	6 55 52	14°10'05"	25°54'0°33'	9°15'21°0'	5°8'11°43'	10°20'15°35'	16°50'8°17'	9°41'19°57'	9°18'9°21'	F 6						
F 6	6 59 48	15°11'13"	9°28'54"	2°2'10°31'	21°39'5°5'	11°47'10°20'	15°34'16°50'	8°8'9°37'	20°3'9°21'	S 7						
S 7	7 3 45	16°12'21"	24°11'3°30'	11°46'22°18'	5°2'11°52'	10°21'15°33'	16°49'8°0'	9°34'20°10'	9°23'9°26'	S 8						
S 8	7 7 42	17°13'28"	8°12'38"	4°56'13°2'	22°56'4°59'	11°56'10°21'	15°33'16°49'	7°54'9°31'	20°16'9°26'	M 9						
M 9	7 11 38	18°14'35"	23°11'6°18'	14°17'23°35'	4°55'12°0'	10°22'15°32'	16°48'7°51'	9°28'20°23'	9°29'9°32'	T 10						
T 10	7 15 35	19°15'42"	7°18'42"	7°37'15°33'	24°14'4°52'	12°5'10°22'	15°31'16°47'	7°D50'9°25'	20°30'9°32'	W 11						
W 11	7 19 31	20°16'49"	22°7'8°52'	16°48'24°53'	4°48'12°9'	10°22'15°31'	16°47'7°51'	9°22'20°36'	9°34'9°37'	T 12						
T 12	7 23 28	21°17'56"	6°12'23"	10°2'18°4'	25°32'4°44'	12°13'10°22'	15°30'16°46'	7°52'9°18'	20°43'9°37'	F 13						
F 13	7 27 24	22°19'02"	20°29'11°7'	19°19'26°11'	4°40'12°17'	10°23'15°30'	16°45'7°R53'	9°15'20°50'	9°40'9°43'	S 14						
S 14	7 31 21	23°20'08"	4°18'22"	12°6'20°34'	26°50'4°36'	12°20'10°23'	15°30'16°44'	7°52'9°12'	20°56'9°43'	S 15						
S 15	7 35 17	24°21'14"	18°4'12°57'	21°50'27°29'	4°31'12°24'	10°R23'15°29'	16°44'7°50'	9°9'21°3'	9°46'9°49'	M 16						
M 16	7 39 14	25°22'20"	1°18'33"	13°41'23°5'	28°7'4°26'	12°28'10°23'	15°29'16°43'	7°45'9°6'	21°10'9°49'	T 17						
T 17	7 43 11	26°23'25"	14°51'14°15'	24°21'28°46'	4°22'12°31'	10°23'15°28'	16°42'7°39'	9°3'21°16'	9°52'9°58'	W 18						
W 18	7 47 7	27°24'30"	27°55'14°40'	25°36'29°25'	4°17'12°35'	10°22'15°28'	16°41'7°32'	8°59'21°23'	9°55'9°58'	T 19						
T 19	7 51 4	28°25'34"	10°34'14°54'	26°52'0°4'4'	4°12'12°38'	10°22'15°28'	16°40'7°24'	8°56'21°30'	9°58'10°1'	F 20						
F 20	7 55 0	29°26'38"	23°26'14°R58'	28°7'0°43'	4°6'12°42'	10°22'15°28'	16°39'7°18'	8°53'21°36'	10°1'9°21'	S 21						
S 21	7 58 57	0°27'40"	5°53'14°50'	29°22'1°22'	4°1'12°45'	10°22'15°28'	16°38'7°12'	8°50'21°43'	10°4'9°21'	S 22						
S 22	8 2 53	1°28'42"	18°6'14°30'	0°38'2°1'	3°55'12°48'	10°21'15°27'	16°37'7°8'	8°47'21°50'	10°8'9°21'	M 23						
M 23	8 6 50	2°29'43"	0°18'9'14°0'	1°53'2°40'	3°49'12°51'	10°21'15°27'	16°36'7°7'	8°43'21°56'	10°11'9°21'	T 24						
T 24	8 10 46	3°30'43"	12°3'13°18'	3°9'3°19'	3°44'12°54'	10°20'15°27'	16°35'7°D6'	8°40'22°3'	10°14'9°21'	W 25						
W 25	8 14 43	4°31'42"	23°52'12°27'	4°24'3°57'	3°38'12°57'	10°20'15°27'	16°34'7°8'	8°37'22°10'	10°17'9°21'	T 26						
T 26	8 18 40	5°32'40"	5°13'39'	11°27'5°39'	4°36'3°31'	12°59'10°19'	15°D27'16°33'	7°9'8°34'	22°16'10°21'	F 27						
F 27	8 22 36	6°33'36"	17°28'10°21'	6°55'5°15'	3°25'13°2'	10°19'15°27'	16°32'7°11'	8°31'22°23'	10°24'9°21'	S 28						
S 28	8 26 33	7°34'31"	29°25'9°10'	8°10'5°54'	3°19'13°4'	10°18'15°27'	16°31'7°13'	8°28'22°29'	10°27'9°21'	S 29						
S 29	8 30 29	8°35'25"	11°34'7°56'	9°25'6°33'	3°12'13°7'	10°17'15°27'	16°30'7°R13'	8°24'22°36'	10°31'9°21'	M 30						
M 30	8 34 26	9°36'18"	24°1'6°42'	10°41'7°12'	3°6'13°9'	10°16'15°27'	16°28'7°12'	8°21'22°43'	10°34'9°21'	T 31						
T 31	8 38 22	10°37'09"	6°11'49"	5°30'11°56'	7°51'2°18'	13°12'10°16'	15°28'16°28'	7°18'8°28'	22°49'10°38'							

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	23s 5	8n49	4s11	23s17	2s 2	23s43	0s18	16s40	0n41	10n38	1n 8	13s 5	2n18	3s26	0n42	14n48	1s49	18n55	14n57	8n17	7n52	4s57	3s38	4n52					
M 2	23 0	12 11	4 43	22 56	1 59	23 42	0 21	16 52	0 40	10 39	1 8	13 6	2 18	3 26	0 42	14 48	1 49	18 55	14 58	8 19	7 53	4 55	3 38	4 52					
T 3	22 55	15 3	5 2	22 34	1 55	23 41	0 23	17 3	0 40	10 40	1 8	13 8	2 18	3 26	0 42	14 48	1 49	18 56	14 58	8 21	7 55	4 54	3 37	4 52					
W 4	22 49	17 15	5 5	22 11	1 50	23 39	0 25	17 14	0 39	10 41	1 8	13 9	2 19	3 27	0 42	14 48	1 49	18 57	14 59	8 25	7 56	4 52	3 36	4 51					
T 5	22 43	18 33	4 52	21 46	1 44	23 36	0 28	17 24	0 39	10 42	1 9	13 10	2 19	3 27	0 42	14 48	1 48	18 57	14 59	8 28	7 57	4 50	3 36	4 51					
F 6	22 36	18 46	4 21	21 20	1 38	23 33	0 30	17 35	0 38	10 44	1 9	13 11	2 19	3 27	0 42	14 48	1 48	18 58	15 0	8 32	7 58	4 48	3 35	4 51					
S 7	22 29	17 49	3 33	20 52	1 31	23 29	0 32	17 45	0 38	10 45	1 9	13 13	2 19	3 27	0 42	14 48	1 48	18 59	15 0	8 35	7 59	4 46	3 34	4 51					
S 8	22 22	15 42	2 31	20 24	1 23	23 24	0 34	17 56	0 37	10 47	1 9	13 14	2 19	3 27	0 42	14 47	1 48	18 59	15 1	8 37	8 1	4 45	3 33	4 50					
M 9	22 14	12 35	1 18	19 55	1 14	23 19	0 36	18 6	0 37	10 48	1 10	13 15	2 19	3 27	0 42	14 47	1 48	19 0	15 1	8 38	8 2	4 43	3 33	4 50					
T 10	22 5	8 41	0 1	19 26	1 4	23 12	0 39	18 16	0 36	10 50	1 10	13 16	2 20	3 28	0 42	14 47	1 48	19 1	15 2	8 39	8 3	4 41	3 32	4 50					
W 11	21 56	4 18	1n16	18 56	0 54	23 5	0 41	18 26	0 36	10 51	1 10	13 17	2 20	3 28	0 43	14 47	1 48	19 1	15 2	8 38	8 4	4 39	3 31	4 50					
T 12	21 47	0s16	2 28	18 26	0 42	22 58	0 43	18 36	0 35	10 53	1 10	13 18	2 20	3 28	0 43	14 47	1 48	19 2	15 3	8 38	8 5	4 37	3 30	4 49					
F 13	21 37	4 46	3 30	17 56	0 29	22 49	0 45	18 46	0 35	10 55	1 11	13 19	2 20	3 28	0 43	14 47	1 48	19 3	15 3	8 38	8 7	4 35	3 29	4 49					
S 14	21 27	8 56	4 19	17 26	0 15	22 40	0 47	18 55	0 34	10 56	1 11	13 20	2 20	3 28	0 43	14 47	1 48	19 3	15 4	8 38	8 8	4 34	3 29	4 49					
S 15	21 17	12 34	4 52	16 58	0 1	22 30	0 49	19 5	0 33	10 58	1 11	13 21	2 21	3 28	0 43	14 47	1 48	19 4	15 4	8 39	8 9	4 32	3 28	4 48					
M 16	21 6	15 28	5 8	16 30	0n15	22 20	0 51	19 14	0 33	11 0	1 11	13 22	2 21	3 28	0 43	14 47	1 48	19 5	15 4	8 40	8 10	4 30	3 27	4 48					
T 17	20 54	17 31	5 7	16 5	0 31	22 9	0 53	19 23	0 32	11 2	1 12	13 23	2 21	3 28	0 43	14 47	1 48	19 6	15 5	8 43	8 11	4 28	3 26	4 48					
W 18	20 42	18 37	4 50	15 41	0 48	21 57	0 55	19 32	0 32	11 4	1 12	13 24	2 21	3 27	0 43	14 47	1 48	19 6	15 5	8 45	8 13	4 26	3 25	4 48					
T 19	20 30	18 44	4 19	15 20	1 6	21 44	0 56	19 41	0 31	11 6	1 12	13 24	2 21	3 27	0 43	14 47	1 48	19 7	15 6	8 48	8 14	4 24	3 24	4 48					
F 20	20 18	17 54	3 35	15 2	1 24	21 31	0 58	19 50	0 30	11 9	1 12	13 25	2 22	3 27	0 43	14 47	1 48	19 8	15 6	8 51	8 15	4 23	3 23	4 47					
S 21	20 5	16 13	2 42	14 47	1 42	21 17	1 0	19 59	0 30	11 11	1 13	13 26	2 22	3 27	0 43	14 47	1 48	19 9	15 7	8 53	8 16	4 21	3 22	4 47					
S 22	19 52	13 48	1 42	14 35	2 0	21 3	1 2	20 7	0 29	11 13	1 13	13 27	2 22	3 27	0 43	14 47	1 47	19 9	15 7	8 54	8 17	4 19	3 21	4 47					
M 23	19 38	10 51	0 38	14 27	2 18	20 48	1 3	20 15	0 28	11 15	1 13	13 27	2 22	3 27	0 43	14 47	1 47	19 10	15 7	8 55	8 19	4 17	3 20	4 47					
T 24	19 24	7 28	0s27	14 23	2 34	20 32	1 5	20 24	0 28	11 18	1 13	13 28	2 23	3 26	0 43	14 47	1 47	19 11	15 8	8 55	8 20	4 15	3 19	4 46					
W 25	19 9	3 50	1 31	14 23	2 50	20 16	1 6	20 32	0 27	11 20	1 13	13 29	2 23	3 26	0 43	14 47	1 47	19 12	15 8	8 54	8 21	4 13	3 18	4 46					
T 26	18 55	0 3	2 30	14 26	3 3	19 59	1 8	20 39	0 26	11 22	1 14	13 29	2 23	3 26	0 43	14 47	1 47	19 13	15 9	8 54	8 22	4 12	3 17	4 46					
F 27	18 40	3n44	3 24	14 32	3 15	19 41	1 9	20 47	0 26	11 25	1 14	13 30	2 23	3 26	0 43	14 47	1 47	19 13	15 9	8 53	8 23	4 10	3 16	4 46					
S 28	18 24	7 24	4 9	14 42	3 25	19 23	1 11	20 55	0 25	11 27	1 14	13 30	2 23	3 25	0 43	14 47	1 47	19 14	15 9	8 53	8 25	4 8	3 15	4 46					
S 29	18 8	10 49	4 44	14 53	3 32	19 5	1 12	21 2	0 24	11 30	1 14	13 31	2 24	3 25	0 43	14 47	1 47	19 15	15 10	8 52	8 26	4 6	3 14	4 45					
M 30	17 52	13 51	5 6	15 7	3 37	18 46	1 13	21 9	0 24	11 33	1 14	13 31	2 24	3 25	0 43	14 47	1 47	19 16	15 10	8 53	8 27	4 4	3 13	4 45					
T 31	17s36	16n18	5s15	15s23	3n39	18s26	1s15	21s16	0n23	11n35	1n15	13s32	2n24	3s24	0n43	14n47	1s47	19n17	15n10	8n54	8n28	4s 2	3s12	4n45					

ASTRODIENST EPHEMERIS for the year 1719
geocentric

FEBRUARY 1719

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	8 42 19	11°37'58	20°11' 2	4°R21	13°11	8°29	2°R52	13°14	10°R15	15°28	16°R26	7°R 6	8°15	22°56	10°41	W 1
T 2	8 46 15	12°38'47	3°43	3°17	14°26	9° 8	2°45	13°16	10°14	15°28	16°25	7° 3	8°12	23° 3	10°45	T 2
F 3	8 50 12	13°39'34	17°49	2°20	15°42	9°47	2°38	13°18	10°13	15°28	16°23	6°59	8° 9	23° 9	10°48	F 3
S 4	8 54 9	14°40'19	2°18	1°30	16°57	10°26	2°31	13°20	10°12	15°28	16°22	6°56	8° 5	23°16	10°52	S 4
S 5	8 58 5	15°41'04	17° 5	0°47	18°12	11° 5	2°24	13°21	10°11	15°29	16°21	6°54	8° 2	23°23	10°55	S 5
M 6	9 2 2	16°41'46	2°11	0°13	19°27	11°43	2°16	13°23	10° 9	15°29	16°20	6°D53	7°59	23°29	10°59	M 6
T 7	9 5 58	17°42'28	16°59	29°47	20°43	12°22	2° 9	13°24	10° 8	15°30	16°18	6°53	7°56	23°36	11° 2	T 7
W 8	9 9 55	18°43'08	1°50	29°29	21°58	13° 1	2° 1	13°26	10° 7	15°30	16°17	6°54	7°53	23°43	11° 6	W 8
T 9	9 13 51	19°43'48	16°28	29°18	23°13	13°40	1°54	13°27	10° 6	15°30	16°15	6°55	7°49	23°49	11°10	T 9
F 10	9 17 48	20°44'26	0°149	29°D16	24°28	14°19	1°46	13°28	10° 4	15°31	16°14	6°57	7°46	23°56	11°13	F 10
S 11	9 21 44	21°45'03	14°50	29°20	25°43	14°57	1°39	13°30	10° 3	15°32	16°13	6°57	7°43	24° 3	11°17	S 11
S 12	9 25 41	22°45'38	28°31	29°31	26°58	15°36	1°31	13°31	10° 2	15°32	16°11	6°R57	7°40	24° 9	11°21	S 12
M13	9 29 38	23°46'13	11°51	29°48	28°14	16°15	1°23	13°32	10° 0	15°33	16°10	6°57	7°37	24°16	11°24	M13
T 14	9 33 34	24°46'46	24°54	0°12	29°29	16°54	1°15	13°32	9°59	15°33	16° 8	6°56	7°34	24°23	11°28	T 14
W15	9 37 31	25°47'19	7°41	0°40	0°44	17°33	1° 8	13°33	9°57	15°34	16° 7	6°54	7°30	24°29	11°32	W15
T 16	9 41 27	26°47'49	20°13	1°13	1°59	18°11	1° 0	13°34	9°55	15°35	16° 5	6°52	7°27	24°36	11°36	T 16
F 17	9 45 24	27°48'19	2°33	1°51	3°14	18°50	0°52	13°34	9°54	15°35	16° 4	6°51	7°24	24°42	11°39	F 17
S 18	9 49 20	28°48'46	14°43	2°33	4°29	19°29	0°44	13°35	9°52	15°36	16° 2	6°50	7°21	24°49	11°43	S 18
S 19	9 53 17	29°49'13	26°45	3°19	5°44	20° 8	0°36	13°35	9°50	15°37	16° 1	6°50	7°18	24°56	11°47	S 19
M20	9 57 13	0°49'37	8°40	4° 9	6°59	20°46	0°28	13°35	9°48	15°38	15°59	6°D49	7°15	25° 2	11°51	M20
T 21	10 1 10	1°50'00	20°30	5° 2	8°14	21°25	0°20	13°R35	9°47	15°39	15°58	6°50	7°11	25° 9	11°55	T 21
W22	10 5 6	2°50'21	2°17	5°58	9°29	22° 4	0°12	13°35	9°45	15°40	15°56	6°50	7° 8	25°16	11°58	W22
T 23	10 9 3	3°50'40	14° 5	6°57	10°44	22°42	0° 5	13°35	9°43	15°41	15°55	6°50	7° 5	25°22	12° 2	T 23
F 24	10 13 0	4°50'57	25°56	7°58	11°59	23°21	29°57	13°35	9°41	15°42	15°53	6°51	7° 2	25°29	12° 6	F 24
S 25	10 16 56	5°51'12	7°54	9° 2	13°14	23°59	29°49	13°35	9°39	15°43	15°52	6°51	6°59	25°36	12°10	S 25
S 26	10 20 53	6°51'26	20° 2	10° 9	14°29	24°38	29°41	13°34	9°37	15°44	15°50	6°R51	6°55	25°42	12°14	S 26
M27	10 24 49	7°51'37	2°11	11°17	15°44	25°17	29°33	13°34	9°35	15°45	15°48	6°D51	6°52	25°49	12°18	M27
T 28	10 28 46	8°51'46	15°11	12°28	16°59	25°55	29°26	13°33	9°33	15°46	15°47	6°51	6°49	25°56	12°21	T 28

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
W 1	17s19	18n 0	5s 7	15s39	3n39	18s 6	1s16	21s23	0n22	11n38	1n15	13s32	2n24	3s24	0n43	14n47
T 2	17 2 18 44	4 41	15 56	3 37	17 45	1 17	21 30	0 21	11 40	1 15	13 33	2 25	3 24	0 43	14 48	1 47
F 3	16 45	18 21	3 59	16 13	3 33	17 24	1 18	21 36	0 21	11 43	1 15	13 33	2 25	3 23	0 43	14 48
S 4	16 27	16 46	3 0	16 30	3 27	17 2	1 19	21 43	0 20	11 46	1 15	13 33	2 25	3 23	0 43	14 48
S 5	16 9 14 2	1 47	16 46	3 19	16 40	1 20	21 49	0 19	11 49	1 16	13 34	2 25	3 22	0 43	14 48	1 47
M 6	15 51	10 21	0 27	17 2	3 10	16 17	1 21	21 55	0 18	11 51	1 16	13 34	2 25	3 22	0 43	14 48
T 7	15 33	6 0	0n56	17 17	3 0	15 54	1 22	22 1	0 18	11 54	1 16	13 34	2 26	3 21	0 43	14 48
W 8	15 14	1 19	2 14	17 32	2 49	15 30	1 22	22 7	0 17	11 57	1 16	13 34	2 26	3 21	0 43	14 49
T 9	14 55	3s22	3 22	17 45	2 38	15 6	1 23	22 12	0 16	12 0	1 16	13 35	2 26	3 20	0 43	14 49
F 10	14 36	7 46	4 16	17 57	2 26	14 42	1 24	22 18	0 15	12 3	1 16	13 35	2 26	3 20	0 44	14 49
S 11	14 17	11 38	4 54	18 8	2 14	14 17	1 24	22 23	0 14	12 6	1 16	13 35	2 27	3 19	0 44	14 49
S 12	13 57	14 45	5 14	18 18	2 2	13 52	1 25	22 28	0 14	12 9	1 17	13 35	2 27	3 19	0 44	14 49
M13	13 37	17 1	5 16	18 26	1 50	13 27	1 25	22 33	0 13	12 11	1 17	13 35	2 27	3 18	0 44	14 50
T 14	13 17	18 21	5 2	18 33	1 37	13 1	1 26	22 38	0 12	12 14	1 17	13 35	2 27	3 17	0 44	14 50
W15	12 56	18 43	4 33	18 39	1 25	12 34	1 26	22 42	0 11	12 17	1 17	13 35	2 27	3 17	0 44	14 50
T 16	12 36	18 8	3 51	18 44	1 13	12 8	1 26	22 47	0 10	12 20	1 17	13 35	2 28	3 16	0 44	14 50
F 17	12 15	16 43	2 59	18 47	1 1	11 41	1 27	22 51	0 9	12 23	1 17	13 35	2 28	3 15	0 44	14 51
S 18	11 54	14 32	2 0	18 49	0 49	11 14	1 27	22 55	0 8	12 26	1 17	13 35	2 28	3 15	0 44	14 51
S 19	11 33	11 45	0 56	18 50	0 38	10 46	1 27	22 59	0 7	12 29	1 17	13 35	2 28	3 14	0 44	14 51
M20	11 12	8 30	0s10	18 49	0 27	10 18	1 27	23 3	0 7	12 32	1 17	13 35	2 29	3 13	0 44	14 52
T 21	10 50	4 56	1 15	18 47	0 16	9 50	1 27	23 6	0 6	12 35	1 17	13 34	2 29	3 12	0 44	14 52
W22	10 29	1 11	2 17	18 43	0 5	9 22	1 27	23 9	0 5	12 37	1 18	13 34	2 29	3 12	0 44	14 52
T 23	10 7	2n36	3 13	18 38	0s 5	8 53	1 27	23 13	0 4	12 40	1 18	13 34	2 29	3 11	0 44	14 52
F 24	9 45	6 17	4 1	18 32	0 15	8 24	1 26	23 16	0 3	12 43	1 18	13 34	2 30	3 10	0 44	14 53
S 25	9 23	9 46	4 39	18 25	0 24	7 55	1 26	23 18	0 2	12 46	1 18	13 33	2 30	3 9	0 44	14 53
S 26	9 0	12 53	5 5	18 16	0 33	7 26	1 26	23 21	0 1	12 49	1 18	13 33	2 30	3 9	0 44	14 53
M27	8 38	15 29	5 17	18 5	0 42	6 57	1 25	23 24	0s 0	12 51	1 18	13 33	2 30	3 8	0 44	14 54
T 28	8s16	17n26	5s15	17s54	0s51	6s27	1s25	23s26	0s 1	12n54	1n18	13s32	2n30	3s 7	0n44	14n54

Julian Day Number = 2348942.5, Delta T = 10.50 sec
Ecliptic obliquity = 23°28'24", Nutation = - 0°00'05", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°49'07", Lahiri = 19°56'08"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1719
geocentric

APRIL 1719

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 34 55	10°39'25	18♌39	3♈ 6	26♈42	16♌17	26°R10	12°R24	8°R15	16♌35	14°R57	6♎28	5♎ 7	29♎29	14♎22	S 1
S 2	12 38 52	11°38'27	3♎15	5° 3	27°56	16°55	26♌ 6	12♎20	8♎12	16°37	14♎56	6°R28	5° 4	29°35	14°25	S 2
M 3	12 42 49	12°37'27	18°11	7° 2	29°10	17°32	26° 2	12°17	8°10	16°39	14°54	6°28	5° 1	29°42	14°29	M 3
T 4	12 46 45	13°36'25	3♎20	9° 2	0♌24	18°10	25°59	12°13	8° 7	16°41	14°53	6°26	4°58	29°49	14°32	T 4
W 5	12 50 42	14°35'21	18°34	11° 3	1°38	18°47	25°56	12° 9	8° 5	16°43	14°52	6°22	4°55	29°55	14°36	W 5
T 6	12 54 38	15°34'14	3♎42	13° 5	2°52	19°25	25°52	12° 6	8° 2	16°45	14°50	6°17	4°52	0♈ 2	14°39	T 6
F 7	12 58 35	16°33'06	18°35	15° 8	4° 6	20° 2	25°50	12° 2	7°59	16°47	14°49	6°11	4°48	0° 9	14°43	F 7
S 8	13 2 31	17°31'56	3♎ 4	17°13	5°20	20°40	25°47	11°58	7°57	16°49	14°48	6° 5	4°45	0°15	14°46	S 8
S 9	13 6 28	18°30'44	17° 6	19°18	6°34	21°17	25°44	11°54	7°54	16°51	14°46	6° 0	4°42	0°22	14°49	S 9
M10	13 10 24	19°29'31	0♌38	21°24	7°48	21°54	25°42	11°50	7°52	16°53	14°45	5°56	4°39	0°28	14°53	M10
T 11	13 14 21	20°28'16	13°42	23°30	9° 1	22°31	25°40	11°46	7°49	16°55	14°44	5°54	4°36	0°35	14°56	T 11
W12	13 18 18	21°26'59	26°22	25°37	10°15	23° 8	25°38	11°42	7°47	16°57	14°43	5°D54	4°32	0°42	14°59	W12
T 13	13 22 14	22°25'40	8♎41	27°43	11°29	23°45	25°36	11°38	7°44	16°59	14°41	5°55	4°29	0°48	15° 3	T 13
F 14	13 26 11	23°24'20	20°45	29°50	12°43	24°22	25°34	11°34	7°42	17° 1	14°40	5°57	4°26	0°55	15° 6	F 14
S 15	13 30 7	24°22'58	2♎39	1♌56	13°56	24°59	25°33	11°30	7°39	17° 3	14°39	5°R57	4°23	1° 2	15° 9	S 15
S 16	13 34 4	25°21'34	14°27	4° 1	15°10	25°36	25°31	11°25	7°37	17° 5	14°38	5°57	4°20	1° 8	15°12	S 16
M17	13 38 0	26°20'08	26°14	6° 5	16°23	26°13	25°30	11°21	7°35	17° 7	14°37	5°55	4°17	1°15	15°15	M17
T 18	13 41 57	27°18'41	8♈ 2	8° 8	17°37	26°50	25°29	11°17	7°32	17° 9	14°36	5°50	4°13	1°22	15°18	T 18
W19	13 45 53	28°17'12	19°54	10° 8	18°50	27°26	25°29	11°12	7°30	17°11	14°35	5°43	4°10	1°28	15°21	W19
T 20	13 49 50	29°15'41	1♌52	12° 7	20° 4	28° 3	25°28	11° 8	7°27	17°14	14°34	5°34	4° 7	1°35	15°24	T 20
F 21	13 53 46	0♌14'08	13°59	14° 3	21°17	28°39	25°28	11° 4	7°25	17°16	14°33	5°24	4° 4	1°42	15°27	F 21
S 22	13 57 43	1°12'33	26°14	15°57	22°31	29°16	25°D28	10°59	7°23	17°18	14°32	5°14	4° 1	1°48	15°30	S 22
S 23	14 1 40	2°10'56	8♎39	17°48	23°44	29°52	25°28	10°55	7°20	17°20	14°31	5° 4	3°57	1°55	15°33	S 23
M24	14 5 36	3° 9'17	21°16	19°35	24°58	0♎28	25°28	10°50	7°18	17°22	14°30	4°56	3°54	2° 2	15°36	M24
T 25	14 9 33	4° 7'37	4♌ 5	21°19	26°11	1° 4	25°28	10°46	7°16	17°25	14°29	4°49	3°51	2° 8	15°39	T 25
W26	14 13 29	5° 5'54	17° 9	22°59	27°24	1°40	25°29	10°41	7°14	17°27	14°28	4°46	3°48	2°15	15°42	W26
T 27	14 17 26	6° 4'09	0♌29	24°36	28°37	2°16	25°30	10°37	7°12	17°29	14°27	4°D44	3°45	2°22	15°44	T 27
F 28	14 21 22	7° 2'22	14° 8	26° 9	29°51	2°52	25°31	10°32	7°10	17°31	14°26	4°44	3°42	2°28	15°47	F 28
S 29	14 25 19	8° 0'33	28° 7	27°38	1♎ 4	3°28	25°32	10°28	7° 7	17°33	14°25	4°R45	3°38	2°35	15°50	S 29
S 30	14 29 15	8♌58'42	12♎27	29♌ 3	2♎17	4♎ 3	25♌33	10♎23	7♎ 5	17♌36	14♎25	4♎45	3♎35	2♈42	15♎52	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	4n13	13n44	1s36	0s21	1s44	9n43	0s38	23s 9	0s41	14n 1	1n16	13s 6	2n36	2s36	0n44	15n10	1s44	19n58	15n17	9n 9	9n39	2s10	1s50	4n41	
S 2	4 37	10 3	0 18	0n31	1 38	10 12	0 36	23 6	0 42	14 2	1 16	13 5	2 36	2 35	0 44	15 10	1 44	19 58	15 16	9 9	9 40	2 8	1 49	4 41	
M 3	5 0	5 39	1n 4	1 24	1 31	10 40	0 34	23 3	0 44	14 3	1 16	13 4	2 36	2 34	0 44	15 11	1 44	19 59	15 16	9 9	9 41	2 6	1 48	4 41	
T 4	5 23	0 50	2 21	2 18	1 24	11 9	0 31	22 59	0 45	14 4	1 16	13 2	2 37	2 33	0 44	15 11	1 44	19 59	15 16	9 10	9 42	2 4	1 46	4 41	
W 5	5 46	4s 4	3 29	3 12	1 16	11 37	0 29	22 56	0 47	14 5	1 16	13 1	2 37	2 32	0 44	15 12	1 43	19 59	15 16	9 11	9 43	2 2	1 45	4 41	
T 6	6 8	8 40	4 22	4 8	1 8	12 4	0 26	22 52	0 48	14 6	1 16	13 0	2 37	2 31	0 44	15 13	1 43	20 0	15 16	9 13	9 45	2 0	1 43	4 41	
F 7	6 31	12 38	4 56	5 3	1 0	12 32	0 24	22 48	0 50	14 7	1 16	12 59	2 37	2 30	0 44	15 13	1 43	20 0	15 16	9 16	9 46	1 58	1 42	4 41	
S 8	6 54	15 44	5 10	5 59	0 51	12 59	0 22	22 44	0 51	14 8	1 16	12 57	2 37	2 29	0 44	15 14	1 43	20 0	15 15	9 18	9 47	1 56	1 41	4 41	
S 9	7 16	17 48	5 5	6 56	0 41	13 26	0 19	22 40	0 53	14 8	1 15	12 56	2 37	2 28	0 44	15 14	1 43	20 1	15 15	9 20	9 48	1 54	1 39	4 42	
M10	7 38	18 46	4 42	7 52	0 31	13 52	0 17	22 35	0 55	14 9	1 15	12 55	2 37	2 27	0 44	15 15	1 43	20 1	15 15	9 21	9 49	1 52	1 38	4 42	
T 11	8 0	18 42	4 6	8 49	0 21	14 18	0 14	22 31	0 56	14 10	1 15	12 53	2 37	2 26	0 44	15 16	1 43	20 1	15 15	9 22	9 50	1 50	1 37	4 42	
W12	8 23	17 40	3 18	9 45	0 11	14 44	0 12	22 26	0 58	14 10	1 15	12 52	2 37	2 25	0 44	15 16	1 43	20 2	15 14	9 22	9 52	1 48	1 35	4 42	
T 13	8 44	15 49	2 22	10 41	0 0	15 9	0 9	22 22	1 0	14 11	1 15	12 51	2 37	2 24	0 44	15 17	1 43	20 2	15 14	9 21	9 53	1 47	1 34	4 42	
F 14	9 6	13 19	1 21	11 36	0n11	15 34	0 6	22 17	1 1	14 11	1 15	12 50	2 37	2 23	0 44	15 17	1 43	20 2	15 14	9 21	9 54	1 45	1 33	4 42	
S 15	9 28	10 16	0 18	12 30	0 22	15 59	0 4	22 12	1 3	14 12	1 15	12 48	2 38	2 22	0 44	15 18	1 43	20 2	15 14	9 20	9 55	1 43	1 31	4 42	
S 16	9 49	6 50	0s46	13 23	0 33	16 23	0 1	22 7	1 5	14 12	1 14	12 47	2 38	2 21	0 44	15 19	1 43	20 3	15 13	9 21	9 56	1 41	1 30	4 42	
M17	10 11	3 9	1 47	14 15	0 44	16 47	0n 1	22 2	1 7	14 12	1 14	12 45	2 38	2 20	0 44	15 19	1 43	20 3	15 13	9 21	9 57	1 39	1 29	4 42	
T 18	10 32	0n41	2 44	15 6	0 54	17 10	0 4	21 56	1 8	14 12	1 14	12 44	2 38	2 19	0 44	15 20	1 43	20 3	15 13	9 23	9 59	1 37	1 27	4 42	
W19	10 53	4 29	3 34	15 54	1 5	17 33	0 7	21 51	1 10	14 12	1 14	12 43	2 38	2 18	0 44	15 21	1 43	20 3	15 13	9 26	10 0	1 35	1 26	4 43	
T 20	11 14	8 9	4 15	16 41	1 15	17 56	0 9	21 45	1 12	14 12	1 14	12 41	2 38	2 17	0 44	15 21	1 43	20 3	15 12	9 29	10 1	1 33	1 25	4 43	
F 21	11 34	11 32	4 44	17 26	1 25	18 18	0 12	21 40	1 14	14 12	1 14	12 40	2 38	2 17	0 44	15 22	1 43	20 3	15 12	9 33	10 2	1 31	1 24	4 43	
S 22	11 55	14 27	5 1	18 9	1 35	18 40	0 15	21 34	1 16	14 12	1 14	12 39	2 38	2 16	0 44	15 22	1 43	20 4	15 12	9 36	10 3	1 29	1 22	4 43	
S 23	12 15	16 46	5 4	18 49	1 44	19 1	0 17	21 28	1 18	14 12	1 13	12 37	2 38	2 15	0 44	15 23	1 43	20 4	15 12	9 40	10 4	1 27	1 21	4 43	
M24	12 35	18 19	4 53	19 27	1 52	19 21	0 20	21 22	1 20	14 12	1 13	12 36	2 38	2 14	0 44	15 24	1 43	20 4	15 11	9 43	10 5	1 25	1 20	4 43	
T 25	12 55	18 58	4 27	20 3	2 0	19 41	0 23	21 16	1 21	14 12	1 13	12 34	2 38	2 13	0 44	15 24	1 43	20 4	15 11	9 45	10 7	1 23	1 19	4 43	
W26	13 14	18 38	3 46	20 36	2 7	20 1	0 25	21 10	1 23	14 11	1 13	12 33	2 38	2 12	0 44	15 25	1 43	20 4	15 11	9 47	10 8	1 21	1 17	4 43	
T 27	13 34	17 16	2 52	21 7	2 14	20 20	0 28	21 4	1 25	14 11	1 13	12 32	2 38	2 11	0 44	15 26	1 43	20 4	15 10	9 47	10 9	1 19	1 16	4 44	
F 28	13 53	14 53	1 48	21 35	2 20	20 39	0 30	20 58	1 27	14 10	1 13	12 30	2 38	2 11	0 44	15 26	1 43	20 4	15 10	9 47	10 10	1 18	1 15	4 44	
S 29	14 12	11 35	0 35	22 0	2 24	20 56	0 33	20 51	1 29	14 10	1 12	12 29	2 38	2 10	0 44	15 27	1 43	20 4	15 10	9 47	10 11	1 16	1 14	4 44	
S 30	14n31	7n32	0n41	22n23	2n28	21n14	0n36	20s45	1s31	14n 9	1n12	12s27	2n38	2s 9	0n44	15n27	1s43	20n 4	15n 9	9n47	10n12	1s14	1s13	4n44	

ASTRODIENST EPHEMERIS for the year 1719
geocentric

MAY 1719

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	14 33 12	9♌56'49	27♍ 5	0♊23	3♊30	4♌39	25♌35	10°R19	7°R 3	17♌38	14°R24	4°R43	3♍32	2°Y48	15°X55	M 1
T 2	14 37 9	10°54'53	11♌57	1°40	4°43	5°14	25°36	10♌14	7♌ 1	17°40	14♍23	4♍39	3°29	2°55	15°58	T 2
W 3	14 41 5	11°52'57	26°57	2°52	5°56	5°50	25°38	10°10	6°59	17°42	14°22	4°32	3°26	3° 2	16° 0	W 3
T 4	14 45 2	12°50'58	11♌56	3°59	7° 9	6°25	25°40	10° 5	6°57	17°45	14°22	4°23	3°23	3° 8	16° 3	T 4
F 5	14 48 58	13°48'58	26°44	5° 3	8°22	7° 0	25°42	10° 1	6°55	17°47	14°21	4°13	3°19	3°15	16° 5	F 5
S 6	14 52 55	14°46'56	11♌14	6° 1	9°35	7°35	25°45	9°56	6°54	17°49	14°20	4° 3	3°16	3°22	16° 7	S 6
S 7	14 56 51	15°44'53	25°19	6°55	10°48	8°10	25°47	9°52	6°52	17°51	14°20	3°53	3°13	3°28	16°10	S 7
M 8	15 0 48	16°42'48	8♌56	7°45	12° 0	8°45	25°50	9°47	6°50	17°54	14°19	3°46	3°10	3°35	16°12	M 8
T 9	15 4 44	17°40'42	22° 5	8°29	13°13	9°19	25°53	9°43	6°48	17°56	14°19	3°41	3° 7	3°42	16°14	T 9
W10	15 8 41	18°38'35	4♌48	9° 9	14°26	9°54	25°56	9°38	6°46	17°58	14°18	3°39	3° 3	3°48	16°17	W10
T 11	15 12 38	19°36'27	17° 9	9°44	15°39	10°28	25°59	9°34	6°45	18° 0	14°18	3°D38	3° 0	3°55	16°19	T 11
F 12	15 16 34	20°34'17	29°14	10°14	16°51	11° 2	26° 3	9°30	6°43	18° 3	14°17	3°R38	2°57	4° 2	16°21	F 12
S 13	15 20 31	21°32'06	11♌ 8	10°40	18° 4	11°36	26° 6	9°25	6°42	18° 5	14°17	3°38	2°54	4° 8	16°23	S 13
S 14	15 24 27	22°29'54	22°56	11° 0	19°17	12°10	26°10	9°21	6°40	18° 7	14°16	3°37	2°51	4°15	16°25	S 14
M15	15 28 24	23°27'41	4°Y44	11°16	20°29	12°44	26°14	9°17	6°38	18° 9	14°16	3°33	2°48	4°22	16°27	M15
T 16	15 32 20	24°25'26	16°35	11°26	21°42	13°18	26°18	9°12	6°37	18°12	14°16	3°27	2°44	4°28	16°29	T 16
W17	15 36 17	25°23'11	28°33	11°32	22°54	13°51	26°22	9° 8	6°36	18°14	14°15	3°18	2°41	4°35	16°31	W17
T 18	15 40 13	26°20'54	10♌40	11°R33	24° 6	14°25	26°27	9° 4	6°34	18°16	14°15	3° 7	2°38	4°42	16°33	T 18
F 19	15 44 10	27°18'36	22°58	11°29	25°19	14°58	26°31	9° 0	6°33	18°18	14°15	2°54	2°35	4°48	16°34	F 19
S 20	15 48 7	28°16'16	5♊29	11°21	26°31	15°31	26°36	8°55	6°31	18°21	14°15	2°40	2°32	4°55	16°36	S 20
S 21	15 52 3	29°13'56	18°11	11° 9	27°44	16° 3	26°41	8°51	6°30	18°23	14°15	2°28	2°29	5° 2	16°38	S 21
M22	15 56 0	0♊11'34	1♌ 5	10°52	28°56	16°36	26°46	8°47	6°29	18°25	14°14	2°17	2°25	5° 8	16°39	M22
T 23	15 59 56	1° 9'11	14°10	10°32	0♌ 8	17° 8	26°51	8°43	6°28	18°27	14°14	2° 8	2°22	5°15	16°41	T 23
W24	16 3 53	2° 6'46	27°27	10° 8	1°20	17°40	26°56	8°39	6°27	18°29	14°14	2° 3	2°19	5°22	16°42	W24
T 25	16 7 49	3° 4'20	10♌56	9°42	2°32	18°12	27° 2	8°35	6°26	18°32	14°14	2° 0	2°16	5°28	16°44	T 25
F 26	16 11 46	4° 1'52	24°37	9°13	3°44	18°44	27° 8	8°31	6°25	18°34	14°D14	1°59	2°13	5°35	16°45	F 26
S 27	16 15 42	4°59'23	8♍32	8°42	4°56	19°16	27°13	8°28	6°24	18°36	14°14	1°59	2° 9	5°42	16°47	S 27
S 28	16 19 39	5°56'53	22°40	8° 9	6° 8	19°47	27°19	8°24	6°23	18°38	14°14	1°59	2° 6	5°48	16°48	S 28
M29	16 23 36	6°54'21	7♌ 1	7°36	7°20	20°18	27°25	8°20	6°22	18°40	14°14	1°56	2° 3	5°55	16°49	M29
T 30	16 27 32	7°51'48	21°32	7° 2	8°32	20°49	27°31	8°17	6°21	18°43	14°14	1°52	2° 0	6° 2	16°51	T 30
W31	16 31 29	8♊49'14	6♌ 9	6♊29	9♌44	21°≈20	27♌38	8♌13	6♌20	18♌45	14♍15	1♍44	1♍57	6°Y 8	16°X52	W31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
M 1	14n49	2n56	1n56	22n44	2n32	21n31	0n38	20s38	1s33	14n 9	1n12	12s26	2n38	2s 8	0n44	15n28
T 2	15 7	1s54	3 5	23 2	2 34	21 47	0 41	20 32	1 35	14 8	1 12	12 25	2 38	2 7	0 44	15 29
W 3	15 25	6 39	4 1	23 18	2 35	22 3	0 44	20 25	1 38	14 7	1 12	12 23	2 38	2 7	0 44	15 29
T 4	15 43	10 59	4 40	23 31	2 35	22 18	0 46	20 18	1 40	14 6	1 12	12 22	2 38	2 6	0 44	15 30
F 5	16 1	14 35	5 0	23 42	2 35	22 32	0 49	20 11	1 42	14 5	1 12	12 21	2 38	2 5	0 44	15 31
S 6	16 18	17 12	5 0	23 51	2 33	22 46	0 51	20 5	1 44	14 5	1 11	12 19	2 38	2 4	0 43	15 31
S 7	16 35	18 42	4 42	23 58	2 31	22 59	0 54	19 58	1 46	14 4	1 11	12 18	2 38	2 4	0 43	15 32
M 8	16 51	19 3	4 8	24 3	2 27	23 11	0 56	19 51	1 48	14 2	1 11	12 17	2 38	2 3	0 43	15 33
T 9	17 8	18 20	3 22	24 6	2 22	23 23	0 59	19 43	1 51	14 1	1 11	12 15	2 38	2 2	0 43	15 33
W10	17 24	16 43	2 27	24 6	2 17	23 34	1 1	19 36	1 53	14 0	1 11	12 14	2 37	2 2	0 43	15 34
T 11	17 40	14 21	1 26	24 5	2 10	23 45	1 3	19 29	1 55	13 59	1 10	12 13	2 37	2 1	0 43	15 34
F 12	17 55	11 23	0 23	24 2	2 2	23 55	1 6	19 22	1 57	13 58	1 10	12 11	2 37	2 1	0 43	15 35
S 13	18 10	8 1	0s40	23 56	1 53	24 4	1 8	19 15	2 0	13 56	1 10	12 10	2 37	2 0	0 43	15 36
S 14	18 25	4 21	1 41	23 50	1 43	24 13	1 10	19 7	2 2	13 55	1 10	12 9	2 37	1 59	0 43	15 36
M15	18 40	0 31	2 37	23 41	1 32	24 20	1 13	19 0	2 5	13 53	1 10	12 7	2 37	1 59	0 43	15 37
T 16	18 54	3n21	3 27	23 31	1 20	24 27	1 15	18 53	2 7	13 52	1 10	12 6	2 37	1 58	0 43	15 37
W17	19 8	7 7	4 8	23 19	1 8	24 34	1 17	18 45	2 9	13 50	1 10	12 5	2 37	1 58	0 43	15 38
T 18	19 22	10 38	4 38	23 5	0 54	24 40	1 19	18 38	2 12	13 49	1 10	12 4	2 37	1 57	0 43	15 39
F 19	19 35	13 46	4 56	22 50	0 39	24 45	1 21	18 31	2 14	13 47	1 9	12 2	2 37	1 57	0 43	15 39
S 20	19 48	16 20	5 0	22 34	0 24	24 49	1 23	18 23	2 17	13 45	1 9	12 1	2 36	1 56	0 43	15 40
S 21	20 1	18 9	4 49	22 17	0 8	24 52	1 25	18 16	2 19	13 43	1 9	12 0	2 36	1 56	0 43	15 41
M22	20 13	19 4	4 24	21 58	0s 8	24 55	1 27	18 8	2 22	13 41	1 9	11 59	2 36	1 55	0 43	15 41
T 23	20 25	19 0	3 44	21 38	0 25	24 57	1 29	18 1	2 24	13 39	1 9	11 58	2 36	1 55	0 43	15 42
W24	20 37	17 54	2 52	21 18	0 43	24 59	1 31	17 53	2 27	13 38	1 9	11 57	2 36	1 54	0 43	15 42
T 25	20 48	15 46	1 49	20 57	1 0	25 0	1 33	17 46	2 30	13 35	1 9	11 56	2 36	1 54	0 43	15 43
F 26	20 59	12 43	0 39	20 35	1 18	25 0	1 34	17 39	2 32	13 33	1 8	11 54	2 36	1 54	0 43	15 44
S 27	21 10	8 55	0n35	20 13	1 35	24 59	1 36	17 31	2 35	13 31	1 8	11 53	2 35	1 53	0 43	15 44
S 28	21 20	4 33	1 47	19 51	1 52	24 57	1 38	17 24	2 38	13 29	1 8	11 52	2 35	1 53	0 43	15 45
M29	21 30	0s 8	2 54	19 30	2 9	24 55	1 39	17 16	2 40	13 27	1 8	11 51	2 35	1 53	0 43	15 45
T 30	21 39	4 51	3 50	19 8	2 25	24 52	1 41	17 9	2 43	13 25	1 8	11 50	2 35	1 52	0 43	15 46
W31	21n48	9s19	4n32	18n48	2s40	24n49	1n42	17s 2	2s46	13n22	1n 8	11s49	2n35	1s52	0n43	15n46

Julian Day Number = 2349031.5, Delta T = 10.49 sec
Ecliptic obliquity = 23°28'25", Nutation = - 0°00'09", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°49'20", Lahiri = 19°56'20"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1719

geocentric

JUNE 1719

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 35 25	9II46'39	20III46	5°R56	10°S56	21°S50	27°Q44	8°R 9	6°R20	18°S47	14°II15	1°R35	1°II54	6°Y15	16°K53	T 1
F 2	16 39 22	10°44'03	5°S15	5°II25	12° 8	22°20	27°51	8°II 6	6°S19	18°49	14°15	1°II24	1°50	6°22	16°54	F 2
S 3	16 43 18	11°41'25	19°31	4°56	13°19	22°50	27°58	8° 3	6°18	18°51	14°15	1°12	1°47	6°28	16°55	S 3
S 4	16 47 15	12°38'47	3°S26	4°29	14°31	23°20	28° 5	7°59	6°18	18°53	14°16	1° 2	1°44	6°35	16°56	S 4
M 5	16 51 11	13°36'09	16°58	4° 5	15°42	23°49	28°12	7°56	6°17	18°55	14°16	0°54	1°41	6°42	16°57	M 5
T 6	16 55 8	14°33'29	0°S 5	3°45	16°54	24°18	28°19	7°53	6°17	18°57	14°16	0°48	1°38	6°48	16°58	T 6
W 7	16 59 5	15°30'49	12°48	3°27	18° 5	24°47	28°26	7°50	6°16	18°59	14°17	0°45	1°35	6°55	16°58	W 7
T 8	17 3 1	16°28'09	25°11	3°14	19°17	25°16	28°33	7°47	6°16	19° 1	14°17	0°44	1°31	7° 2	16°59	T 8
F 9	17 6 58	17°25'28	7°K18	3° 5	20°28	25°44	28°41	7°44	6°16	19° 4	14°17	0°D44	1°28	7° 8	17° 0	F 9
S 10	17 10 54	18°22'46	19°14	3° 0	21°39	26°12	28°49	7°41	6°16	19° 6	14°18	0°R44	1°25	7°15	17° 0	S 10
S 11	17 14 51	19°20'04	1°Y 4	3°D 0	22°51	26°40	28°56	7°38	6°15	19° 8	14°18	0°43	1°22	7°22	17° 1	S 11
M12	17 18 47	20°17'22	12°54	3° 4	24° 2	27° 7	29° 4	7°35	6°15	19°10	14°19	0°41	1°19	7°28	17° 1	M12
T 13	17 22 44	21°14'39	24°48	3°13	25°13	27°34	29°12	7°33	6°15	19°12	14°19	0°36	1°15	7°35	17° 2	T 13
W14	17 26 40	22°11'56	6°S51	3°26	26°24	28° 1	29°20	7°30	6°D15	19°13	14°20	0°29	1°12	7°42	17° 2	W14
T 15	17 30 37	23° 9'13	19° 6	3°44	27°35	28°27	29°29	7°28	6°15	19°15	14°21	0°20	1° 9	7°48	17° 3	T 15
F 16	17 34 34	24° 6'29	1°II36	4° 6	28°46	28°53	29°37	7°25	6°15	19°17	14°21	0° 9	1° 6	7°55	17° 3	F 16
S 17	17 38 30	25° 3'46	14°21	4°33	29°57	29°18	29°46	7°23	6°15	19°19	14°22	29°S58	1° 3	8° 2	17° 3	S 17
S 18	17 42 27	26° 1'01	27°21	5° 5	1°L 8	29°43	29°54	7°21	6°15	19°21	14°23	29°47	1° 0	8° 8	17° 3	S 18
M19	17 46 23	26°58'17	10°S36	5°41	2°18	0°K 8	0°II 3	7°19	6°16	19°23	14°23	29°38	0°56	8°15	17° 3	M19
T 20	17 50 20	27°55'31	24° 4	6°21	3°29	0°32	0°12	7°17	6°16	19°25	14°24	29°31	0°53	8°22	17° 3	T 20
W21	17 54 16	28°52'46	7°L42	7° 6	4°40	0°56	0°21	7°15	6°16	19°27	14°25	29°27	0°50	8°28	17°R 3	W21
T 22	17 58 13	29°50'00	21°30	7°55	5°50	1°20	0°30	7°13	6°17	19°29	14°26	29°25	0°47	8°35	17° 3	T 22
F 23	18 2 10	0°S47'13	5°II24	8°48	7° 1	1°43	0°39	7°11	6°17	19°30	14°27	29°D25	0°44	8°42	17° 3	F 23
S 24	18 6 6	1°44'26	19°26	9°45	8°11	2° 6	0°48	7° 9	6°17	19°32	14°27	29°25	0°40	8°49	17° 3	S 24
S 25	18 10 3	2°41'38	3°S33	10°47	9°21	2°28	0°57	7° 8	6°18	19°34	14°28	29°R26	0°37	8°55	17° 3	S 25
M26	18 13 59	3°38'50	17°45	11°52	10°32	2°49	1° 7	7° 6	6°19	19°36	14°29	29°25	0°34	9° 2	17° 3	M26
T 27	18 17 56	4°36'01	1°L59	13° 1	11°42	3°11	1°16	7° 5	6°19	19°37	14°30	29°22	0°31	9° 9	17° 2	T 27
W28	18 21 52	5°33'12	16°13	14°15	12°52	3°31	1°26	7° 3	6°20	19°39	14°31	29°17	0°28	9°15	17° 2	W28
T 29	18 25 49	6°30'22	0°S24	15°32	14° 2	3°52	1°36	7° 2	6°21	19°41	14°32	29°10	0°25	9°22	17° 1	T 29
F 30	18 29 45	7°S27'33	14°S28	16°II53	15°L12	4°K11	1°II45	7°II 1	6°S22	19°S42	14°II33	29°L 2	0°II21	9°Y29	17°K 1	F 30

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
T 1	21n57	13s13	4n56	18n28	2s54	24n44	1n43	16s55	2s49	13n20	1n 8	11s48	2n35	1s52	0n43	15n47
F 2	22 5	16 17	5 0	18 9	3 8	24 39	1 45	16 47	2 52	13 18	1 7	11 47	2 34	1 52	0 43	15 48
S 3	22 13	18 18	4 46	17 52	3 20	24 34	1 46	16 40	2 55	13 15	1 7	11 47	2 34	1 51	0 42	15 48
S 4	22 21	19 11	4 15	17 36	3 31	24 27	1 47	16 33	2 57	13 13	1 7	11 46	2 34	1 51	0 42	15 49
M 5	22 28	18 55	3 30	17 22	3 41	24 20	1 48	16 26	3 0	13 10	1 7	11 45	2 34	1 51	0 42	15 49
T 6	22 35	17 38	2 35	17 10	3 50	24 12	1 49	16 19	3 3	13 7	1 7	11 44	2 34	1 51	0 42	15 50
W 7	22 41	15 30	1 34	16 59	3 57	24 4	1 50	16 12	3 6	13 5	1 7	11 43	2 34	1 51	0 42	15 50
T 8	22 47	12 41	0 29	16 51	4 3	23 55	1 51	16 5	3 9	13 2	1 7	11 42	2 33	1 51	0 42	15 51
F 9	22 53	9 23	0s35	16 45	4 8	23 45	1 52	15 58	3 12	12 59	1 7	11 42	2 33	1 51	0 42	15 51
S 10	22 58	5 45	1 37	16 40	4 12	23 35	1 52	15 52	3 15	12 56	1 6	11 41	2 33	1 51	0 42	15 52
S 11	23 3	1 56	2 34	16 38	4 14	23 23	1 53	15 45	3 18	12 54	1 6	11 40	2 33	1 51	0 42	15 52
M12	23 7	1n58	3 24	16 38	4 15	23 12	1 53	15 39	3 22	12 51	1 6	11 39	2 32	1 51	0 42	15 53
T 13	23 11	5 48	4 6	16 40	4 15	22 59	1 54	15 32	3 25	12 48	1 6	11 39	2 32	1 51	0 42	15 53
W14	23 15	9 26	4 38	16 43	4 13	22 46	1 54	15 26	3 28	12 45	1 6	11 38	2 32	1 51	0 42	15 54
T 15	23 18	12 45	4 57	16 49	4 11	22 33	1 55	15 20	3 31	12 42	1 6	11 38	2 32	1 51	0 42	15 54
F 16	23 21	15 34	5 3	16 56	4 8	22 18	1 55	15 13	3 34	12 39	1 6	11 37	2 32	1 51	0 42	15 55
S 17	23 23	17 42	4 54	17 5	4 3	22 4	1 55	15 7	3 37	12 36	1 6	11 37	2 31	1 51	0 42	15 55
S 18	23 25	18 58	4 29	17 16	3 58	21 48	1 55	15 2	3 41	12 33	1 5	11 36	2 31	1 51	0 42	15 56
M19	23 26	19 14	3 50	17 28	3 52	21 32	1 55	14 56	3 44	12 29	1 5	11 36	2 31	1 51	0 42	15 56
T 20	23 27	18 25	2 57	17 42	3 45	21 16	1 55	14 50	3 47	12 26	1 5	11 35	2 31	1 51	0 42	15 57
W21	23 28	16 33	1 53	17 57	3 38	20 59	1 54	14 45	3 51	12 23	1 5	11 35	2 30	1 51	0 42	15 57
T 22	23 28	13 42	0 42	18 13	3 29	20 41	1 54	14 39	3 54	12 20	1 5	11 34	2 30	1 51	0 42	15 58
F 23	23 28	10 2	0n32	18 30	3 20	20 23	1 54	14 34	3 57	12 16	1 5	11 34	2 30	1 52	0 42	15 58
S 24	23 28	5 48	1 45	18 48	3 11	20 4	1 53	14 29	4 1	12 13	1 5	11 34	2 30	1 52	0 42	15 59
S 25	23 27	1 13	2 52	19 7	3 1	19 45	1 52	14 24	4 4	12 9	1 5	11 33	2 29	1 52	0 42	15 59
M26	23 25	3s26	3 49	19 26	2 50	19 25	1 52	14 20	4 8	12 6	1 5	11 33	2 29	1 52	0 42	16 0
T 27	23 24	7 55	4 32	19 46	2 39	19 5	1 51	14 15	4 11	12 3	1 4	11 33	2 29	1 53	0 41	16 0
W28	23 21	11 57	4 58	20 6	2 28	18 44	1 50	14 11	4 15	11 59	1 4	11 33	2 29	1 53	0 41	16 0
T 29	23 19	15 16	5 6	20 26	2 16	18 23	1 49	14 7	4 18	11 55	1 4	11 33	2 28	1 53	0 41	16 1
F 30	23n16	17s41	4n55	20n46	2s 4	18n 1	1n48	14s 3	4s22	11n52	1n 4	11s32	2n28	1s54	0n41	16n 1

Julian Day Number = 2349062.5, Delta T = 10.49 sec

Ecliptic obliquity = 23°28'24", Nutation = - 0°00'09", out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°49'24", Lahiri = 19°56'24"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1719

geocentric

JULY 1719

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	18 33 42	8 ²⁴ 43	28 ¹⁹ 19	18 ¹¹ 17	16 ⁰² 22	4 ³¹ 31	1 ¹⁷ 55	7°R 0	6 ²² 22	19 ⁸ 44	14 ¹⁷ 34	28°R54	0 ¹⁷ 18	9 ³⁵ 35	17°R 0	S 1
S 2	18 37 39	9°21'53	11 ³ 54	19°46	17°32	4°49	2° 5	6 ¹⁵ 59	6°23	19°46	14°35	28 ⁰ 47	0°15	9°42	17 ⁰ 18	S 2
M 3	18 41 35	10°19'04	25°10	21°18	18°41	5° 8	2°15	6°58	6°24	19°47	14°37	28°41	0°12	9°49	16°59	M 3
T 4	18 45 32	11°16'14	8 ²⁴ 7	22°54	19°51	5°25	2°25	6°57	6°25	19°49	14°38	28°37	0° 9	9°55	16°58	T 4
W 5	18 49 28	12°13'25	20°45	24°33	21° 0	5°42	2°36	6°57	6°26	19°50	14°39	28°35	0° 6	10° 2	16°58	W 5
T 6	18 53 25	13°10'36	3 ³¹ 5	26°15	22°10	5°59	2°46	6°56	6°27	19°52	14°40	28°D35	0° 2	10° 9	16°57	T 6
F 7	18 57 21	14° 7'47	15°11	28° 1	23°19	6°15	2°56	6°56	6°29	19°53	14°41	28°36	29 ⁰ 59	10°15	16°56	F 7
S 8	19 1 18	15° 4'59	27° 8	29°50	24°28	6°30	3° 7	6°55	6°30	19°55	14°43	28°37	29°56	10°22	16°55	S 8
S 9	19 5 14	16° 2'11	8 ¹⁷ 59	1 ³ 42	25°37	6°45	3°17	6°55	6°31	19°56	14°44	28°38	29°53	10°29	16°54	S 9
M10	19 9 11	16°59'24	20°50	3°37	26°46	6°59	3°28	6°55	6°32	19°58	14°45	28°R38	29°50	10°35	16°53	M10
T 11	19 13 8	17°56'37	2 ⁸ 46	5°35	27°55	7°12	3°39	6°D55	6°34	19°59	14°47	28°37	29°46	10°42	16°52	T 11
W12	19 17 4	18°53'51	14°52	7°34	29° 4	7°25	3°50	6°55	6°35	20° 0	14°48	28°34	29°43	10°49	16°51	W12
T 13	19 21 1	19°51'06	27°11	9°36	0 ¹⁷ 13	7°37	4° 0	6°55	6°37	20° 2	14°49	28°30	29°40	10°55	16°50	T 13
F 14	19 24 57	20°48'21	9 ¹¹ 48	11°40	1°21	7°48	4°11	6°55	6°38	20° 3	14°51	28°24	29°37	11° 2	16°48	F 14
S 15	19 28 54	21°45'37	22°43	13°45	2°30	7°59	4°22	6°55	6°40	20° 4	14°52	28°18	29°34	11° 9	16°47	S 15
S 16	19 32 50	22°42'53	5 ³ 59	15°51	3°38	8° 8	4°34	6°56	6°41	20° 6	14°54	28°12	29°31	11°15	16°46	S 16
M17	19 36 47	23°40'10	19°33	17°58	4°47	8°18	4°45	6°56	6°43	20° 7	14°55	28° 8	29°27	11°22	16°44	M17
T 18	19 40 43	24°37'28	3 ⁰ 23	20° 5	5°55	8°26	4°56	6°57	6°45	20° 8	14°57	28° 4	29°24	11°29	16°43	T 18
W19	19 44 40	25°34'46	17°27	22°13	7° 3	8°34	5° 7	6°58	6°46	20° 9	14°58	28° 2	29°21	11°35	16°41	W19
T 20	19 48 37	26°32'04	1 ¹⁷ 39	24°21	8°11	8°41	5°19	6°58	6°48	20°10	15° 0	28°D 2	29°18	11°42	16°40	T 20
F 21	19 52 33	27°29'23	15°57	26°28	9°19	8°47	5°30	6°59	6°50	20°12	15° 1	28° 3	29°15	11°49	16°38	F 21
S 22	19 56 30	28°26'43	0 ² 16	28°35	10°27	8°52	5°41	7° 0	6°52	20°13	15° 3	28° 4	29°12	11°56	16°37	S 22
S 23	20 0 26	29°24'02	14°33	0 ⁰ 41	11°34	8°57	5°53	7° 1	6°54	20°14	15° 5	28° 5	29° 8	12° 2	16°35	S 23
M24	20 4 23	0 ⁰ 21'22	28°47	2°46	12°42	9° 1	6° 5	7° 3	6°56	20°15	15° 6	28°R 6	29° 5	12° 9	16°33	M24
T 25	20 8 19	1°18'43	12 ¹¹ 53	4°50	13°49	9° 4	6°16	7° 4	6°58	20°16	15° 8	28° 5	29° 2	12°16	16°32	T 25
W26	20 12 16	2°16'04	26°52	6°53	14°56	9° 6	6°28	7° 5	7° 0	20°17	15°10	28° 4	28°59	12°22	16°30	W26
T 27	20 16 12	3°13'26	10 ¹⁷ 41	8°55	16° 3	9° 7	6°40	7° 7	7° 2	20°18	15°11	28° 1	28°56	12°29	16°28	T 27
F 28	20 20 9	4°10'48	24°19	10°55	17°10	9°R 8	6°52	7° 8	7° 4	20°19	15°13	27°58	28°52	12°36	16°26	F 28
S 29	20 24 6	5° 8'11	7 ³ 43	12°54	18°17	9° 8	7° 3	7°10	7° 6	20°19	15°15	27°55	28°49	12°42	16°24	S 29
S 30	20 28 2	6° 5'35	20°54	14°51	19°23	9° 7	7°15	7°12	7° 9	20°20	15°17	27°51	28°46	12°49	16°22	S 30
M31	20 31 59	7 ⁰ 2'59	3 ²⁴ 49	16 ⁰ 47	20 ¹⁷ 30	9 ¹¹ 5	7 ¹⁷ 27	7 ¹¹ 14	7 ²¹ 11	20 ²¹ 21	15 ¹⁷ 18	27 ⁰ 49	28 ⁰ 43	12 ¹⁷ 56	16 ¹¹ 20	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	23n12	19s 0	4n27	21n 6	1s52	17n39	1n47	13s59	4s25	11n48	1n 4	11s32	2n28	1s54	0n41	16n 2
S 2	23 9	19 13	3 45	21 26	1 39	17 17	1 46	13 55	4 29	11 45	1 4	11 32	2 28	1 55	0 41	16 2
M 3	23 4	18 20	2 50	21 45	1 27	16 54	1 44	13 52	4 32	11 41	1 4	11 32	2 27	1 55	0 41	16 2
T 4	23 0	16 31	1 48	22 3	1 14	16 30	1 43	13 48	4 36	11 37	1 4	11 32	2 27	1 55	0 41	16 3
W 5	22 55	13 56	0 42	22 20	1 1	16 7	1 41	13 45	4 39	11 33	1 4	11 32	2 27	1 56	0 41	16 3
T 6	22 49	10 46	0s24	22 36	0 49	15 43	1 39	13 43	4 43	11 30	1 4	11 32	2 27	1 56	0 41	16 3
F 7	22 43	7 13	1 29	22 51	0 36	15 18	1 38	13 40	4 47	11 26	1 4	11 32	2 26	1 57	0 41	16 4
S 8	22 37	3 25	2 29	23 5	0 24	14 53	1 36	13 38	4 50	11 22	1 4	11 33	2 26	1 57	0 41	16 4
S 9	22 31	0n29	3 22	23 16	0 12	14 28	1 34	13 36	4 54	11 18	1 3	11 33	2 26	1 58	0 41	16 5
M10	22 24	4 21	4 6	23 26	0n 0	14 3	1 32	13 34	4 58	11 14	1 3	11 33	2 26	1 58	0 41	16 5
T 11	22 16	8 4	4 40	23 33	0 12	13 37	1 30	13 32	5 1	11 10	1 3	11 33	2 25	1 59	0 41	16 5
W12	22 8	11 30	5 2	23 38	0 23	13 11	1 27	13 31	5 5	11 6	1 3	11 33	2 25	2 0	0 41	16 5
T 13	22 0	14 31	5 11	23 41	0 33	12 44	1 25	13 29	5 8	11 2	1 3	11 34	2 25	2 0	0 41	16 6
F 14	21 52	16 56	5 5	23 41	0 43	12 18	1 23	13 28	5 12	10 58	1 3	11 34	2 25	2 1	0 41	16 6
S 15	21 43	18 34	4 43	23 38	0 53	11 51	1 20	13 28	5 16	10 54	1 3	11 34	2 24	2 1	0 41	16 6
S 16	21 33	19 14	4 6	23 33	1 1	11 23	1 17	13 27	5 19	10 50	1 3	11 35	2 24	2 2	0 41	16 7
M17	21 24	18 50	3 15	23 25	1 9	10 56	1 15	13 27	5 23	10 46	1 3	11 35	2 24	2 3	0 41	16 7
T 18	21 14	17 19	2 11	23 14	1 16	10 28	1 12	13 27	5 26	10 41	1 3	11 36	2 23	2 4	0 41	16 7
W19	21 3	14 43	0 58	23 0	1 23	10 0	1 9	13 28	5 30	10 37	1 3	11 36	2 23	2 4	0 41	16 8
T 20	20 53	11 13	0n20	22 44	1 29	9 32	1 6	13 28	5 33	10 33	1 3	11 37	2 23	2 5	0 41	16 8
F 21	20 42	7 2	1 37	22 25	1 34	9 3	1 3	13 29	5 37	10 29	1 3	11 37	2 23	2 6	0 40	16 8
S 22	20 30	2 27	2 48	22 4	1 38	8 35	1 0	13 30	5 40	10 24	1 3	11 38	2 22	2 7	0 40	16 8
S 23	20 18	2s15	3 48	21 41	1 41	8 6	0 56	13 32	5 44	10 20	1 3	11 38	2 22	2 7	0 40	16 8
M24	20 6	6 47	4 34	21 15	1 44	7 37	0 53	13 33	5 47	10 16	1 2	11 39	2 22	2 8	0 40	16 9
T 25	19 54	10 55	5 3	20 47	1 46	7 8	0 49	13 35	5 50	10 11	1 2	11 40	2 22	2 9	0 40	16 9
W26	19 41	14 23	5 14	20 18	1 47	6 39	0 46	13 37	5 53	10 7	1 2	11 40	2 21	2 10	0 40	16 9
T 27	19 28	17 1	5 6	19 47	1 47	6 9	0 42	13 40	5 57	10 3	1 2	11 41	2 21	2 11	0 40	16 9
F 28	19 14	18 40	4 42	19 14	1 47	5 40	0 38	13 42	6 0	9 58	1 2	11 42	2 21	2 12	0 40	16 9
S 29	19 1	19 14	4 2	18 40	1 46	5 10	0 34	13 45	6 3	9 54	1 2	11 43	2 21	2 13	0 40	16 10
S 30	18 47	18 44	3 9	18 4	1 45	4 40	0 30	13 48	6 6	9 49	1 2	11 43	2 20	2 13	0 40	16 10
M31	18n32	17s15	2n 8	17n28	1n42	4n10	0n26	13s51	6s 9	9n45	1n 2	11s44	2n20	2s14	0n40	16n10

Julian Day Number = 2349092.5, Delta T = 10.49 sec
 Ecliptic obliquity = 23°28'24", Nutation = - 0°00'08", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°49'28", Lahiri = 19°56'28"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1719

geocentric

AUGUST 1719

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 35 55	8♌0'25	16♊30	18♌41	21♏36	9♍3	7♏39	7♏15	7♏13	20♌22	15♏20	27♍48	28♌40	13♏2	16♍18	T 1
W 2	20 39 52	8♌57'51	28♌56	20°33	22°42	9♏0	7°51	7°17	7°16	20°23	15°22	27°D47	28°37	13°9	16♏16	W 2
T 3	20 43 48	9°55'19	11♏10	22°24	23°48	8°56	8°3	7°20	7°18	20°23	15°24	27♌48	28°33	13°16	16°14	T 3
F 4	20 47 45	10°52'47	23°12	24°14	24°54	8°51	8°16	7°22	7°20	20°24	15°26	27°49	28°30	13°22	16°12	F 4
S 5	20 51 41	11°50'17	5♏7	26°1	25°59	8°45	8°28	7°24	7°23	20°25	15°28	27°50	28°27	13°29	16°9	S 5
S 6	20 55 38	12°47'49	16°58	27°48	27°5	8°39	8°40	7°27	7°25	20°25	15°29	27°52	28°24	13°36	16°7	S 6
M 7	20 59 35	13°45'21	28°49	29°32	28°10	8°32	8°52	7°29	7°28	20°26	15°31	27°53	28°21	13°42	16°5	M 7
T 8	21 3 31	14°42'55	10♏45	1♏16	29°15	8°24	9°5	7°32	7°31	20°26	15°33	27°R53	28°18	13°49	16°2	T 8
W 9	21 7 28	15°40'31	22°50	2°57	0♏20	8°15	9°17	7°34	7°33	20°27	15°35	27°53	28°14	13°56	16°0	W 9
T 10	21 11 24	16°38'07	5♏10	4°37	1°24	8°6	9°29	7°37	7°36	20°28	15°37	27°53	28°11	14°2	15°58	T 10
F 11	21 15 21	17°35'46	17°47	6°16	2°29	7°56	9°42	7°40	7°39	20°28	15°39	27°52	28°8	14°9	15°55	F 11
S 12	21 19 17	18°33'26	0♏45	7°53	3°33	7°45	9°54	7°43	7°41	20°28	15°41	27°50	28°5	14°16	15°53	S 12
S 13	21 23 14	19°31'08	14°7	9°29	4°37	7°34	10°7	7°46	7°44	20°29	15°43	27°49	28°2	14°23	15°50	S 13
M14	21 27 10	20°28'51	27°52	11°3	5°41	7°22	10°19	7°49	7°47	20°29	15°45	27°48	27°58	14°29	15°48	M14
T 15	21 31 7	21°26'35	12♌0	12°36	6°44	7°10	10°32	7°52	7°50	20°30	15°47	27°48	27°55	14°36	15°45	T 15
W16	21 35 4	22°24'21	26°25	14°7	7°48	6°57	10°45	7°56	7°53	20°30	15°49	27°D48	27°52	14°43	15°43	W16
T 17	21 39 0	23°22'08	11♏3	15°37	8°51	6°43	10°57	7°59	7°56	20°30	15°51	27°48	27°49	14°49	15°40	T 17
F 18	21 42 57	24°19'56	25°47	17°5	9°54	6°30	11°10	8°2	7°59	20°30	15°53	27°48	27°46	14°56	15°38	F 18
S 19	21 46 53	25°17'46	10♏30	18°32	10°56	6°15	11°23	8°6	8°2	20°31	15°55	27°48	27°43	15°3	15°35	S 19
S 20	21 50 50	26°15'37	25°7	19°57	11°59	6°0	11°35	8°10	8°5	20°31	15°57	27°49	27°39	15°9	15°32	S 20
M21	21 54 46	27°13'29	9♏32	21°21	13°1	5°45	11°48	8°13	8°8	20°31	15°59	27°49	27°36	15°16	15°30	M21
T 22	21 58 43	28°11'22	23°42	22°43	14°3	5°30	12°1	8°17	8°11	20°31	16°1	27°49	27°33	15°23	15°27	T 22
W23	22 2 39	29°9'17	7♏31	24°4	15°4	5°15	12°14	8°21	8°14	20°31	16°4	27°49	27°30	15°29	15°24	W23
T 24	22 6 36	0♏7'13	21°11	25°22	16°5	4°59	12°26	8°25	8°17	20°31	16°6	27°49	27°27	15°36	15°22	T 24
F 25	22 10 32	1°5'10	4♏29	26°40	17°6	4°43	12°39	8°29	8°20	20°R31	16°8	27°49	27°24	15°43	15°19	F 25
S 26	22 14 29	2°3'08	17°32	27°55	18°7	4°27	12°52	8°33	8°24	20°31	16°10	27°49	27°20	15°49	15°16	S 26
S 27	22 18 26	3°1'08	0♏21	29°8	19°7	4°11	13°5	8°37	8°27	20°31	16°12	27°50	27°17	15°56	15°13	S 27
M28	22 22 22	3°59'10	12°56	0♏20	20°7	3°55	13°18	8°41	8°30	20°31	16°14	27°50	27°14	16°3	15°10	M28
T 29	22 26 19	4°57'13	25°19	1°30	21°6	3°39	13°31	8°46	8°33	20°31	16°16	27°R51	27°11	16°10	15°8	T 29
W30	22 30 15	5°55'17	7♏32	2°37	22°6	3°23	13°44	8°50	8°37	20°31	16°18	27°50	27°8	16°16	15°5	W30
T 31	22 34 12	6♏53'23	19♏36	3♏43	23♏4	3♏7	13♏57	8♏55	8♏40	20♏30	16♏21	27♏50	27♏4	16♏23	15♏2	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
T 1	18n18	14s56	1n2	16n50	1n40	3n41	0n22	13s55	6s11	9n40	1n2	11s45	2n20	2s15	0n40	16n10
W 2	18 3	11 58	0s 6	16 11	1 37	3 11	0 18	13 59	6 14	9 36	1 2	11 46	2 19	2 16	0 40	16 10
T 3	17 47	8 31	1 13	15 32	1 33	2 40	0 14	14 3	6 17	9 31	1 2	11 47	2 19	2 17	0 40	16 10
F 4	17 32	4 47	2 16	14 52	1 29	2 10	0 9	14 7	6 19	9 27	1 2	11 48	2 19	2 18	0 40	16 11
S 5	17 16	0 54	3 12	14 11	1 24	1 40	0 5	14 11	6 22	9 22	1 2	11 49	2 19	2 19	0 40	16 11
S 6	17 0	2n59	4 0	13 30	1 19	1 10	0 0	14 16	6 24	9 17	1 2	11 50	2 18	2 20	0 40	16 11
M 7	16 43	6 45	4 37	12 48	1 14	0 40	0s 4	14 20	6 26	9 13	1 2	11 51	2 18	2 21	0 40	16 11
T 8	16 27	10 16	5 3	12 6	1 8	0 9	0 9	14 25	6 28	9 8	1 2	11 52	2 18	2 22	0 40	16 11
W 9	16 10	13 25	5 16	11 24	1 2	0s21	0 14	14 30	6 30	9 3	1 2	11 53	2 18	2 24	0 40	16 11
T 10	15 52	16 2	5 14	10 42	0 56	0 51	0 19	14 35	6 32	8 59	1 2	11 54	2 17	2 25	0 40	16 11
F 11	15 35	17 58	4 58	9 59	0 49	1 21	0 24	14 41	6 33	8 54	1 2	11 55	2 17	2 26	0 40	16 11
S 12	15 17	19 2	4 26	9 17	0 42	1 51	0 29	14 46	6 35	8 49	1 2	11 57	2 17	2 27	0 40	16 11
S 13	14 59	19 5	3 39	8 34	0 35	2 21	0 34	14 52	6 36	8 44	1 2	11 58	2 17	2 28	0 40	16 11
M14	14 41	18 2	2 39	7 51	0 28	2 52	0 39	14 57	6 37	8 40	1 2	11 59	2 16	2 29	0 40	16 11
T 15	14 23	15 50	1 27	7 9	0 20	3 22	0 44	15 3	6 38	8 35	1 2	12 0	2 16	2 30	0 40	16 11
W16	14 4	12 37	0 8	6 26	0 12	3 52	0 50	15 8	6 39	8 30	1 2	12 2	2 16	2 31	0 40	16 11
T 17	13 45	8 34	1n13	5 44	0 4	4 21	0 55	15 14	6 40	8 25	1 2	12 3	2 16	2 33	0 40	16 11
F 18	13 26	3 58	2 29	5 2	0s 4	4 51	1 1	15 20	6 40	8 20	1 2	12 4	2 15	2 34	0 40	16 11
S 19	13 6	0s51	3 36	4 21	0 13	5 21	1 6	15 25	6 40	8 16	1 2	12 6	2 15	2 35	0 40	16 11
S 20	12 47	5 35	4 27	3 39	0 21	5 50	1 12	15 31	6 40	8 11	1 2	12 7	2 15	2 36	0 39	16 11
M21	12 27	9 55	5 2	2 58	0 30	6 20	1 17	15 36	6 40	8 6	1 2	12 8	2 15	2 38	0 39	16 11
T 22	12 7	13 36	5 17	2 18	0 39	6 49	1 23	15 42	6 40	8 1	1 2	12 10	2 14	2 39	0 39	16 11
W23	11 47	16 28	5 13	1 38	0 48	7 18	1 29	15 47	6 39	7 56	1 2	12 11	2 14	2 40	0 39	16 11
T 24	11 27	18 20	4 52	0 58	0 57	7 47	1 35	15 52	6 39	7 51	1 2	12 13	2 14	2 41	0 39	16 11
F 25	11 6	19 9	4 15	0 19	1 6	8 16	1 40	15 57	6 38	7 46	1 2	12 14	2 14	2 43	0 39	16 11
S 26	10 46	18 55	3 26	0s19	1 15	8 45	1 46	16 2	6 37	7 41	1 2	12 16	2 14	2 44	0 39	16 11
S 27	10 25	17 43	2 27	0 57	1 24	9 14	1 52	16 7	6 35	7 36	1 2	12 17	2 13	2 45	0 39	16 11
M28	10 4	15 39	1 22	1 34	1 34	9 42	1 58	16 11	6 34	7 31	1 2	12 19	2 13	2 46	0 39	16 11
T 29	9 43	12 53	0 14	2 10	1 43	10 10	2 4	16 16	6 32	7 26	1 2	12 21	2 13	2 48	0 39	16 11
W30	9 21	9 35	0s53	2 45	1 52	10 38	2 10	16 20	6 30	7 22	1 2	12 22	2 13	2 49	0 39	16 11
T 31	9n 0	5s56	1s58	3s20	2s 1	11s 6	2s16	16s24	6s28	7n17	1n 2	12s24	2n12	2s50	0n39	16n11

Julian Day Number = 2349123.5, Delta T = 10.49 sec
 Ecliptic obliquity = 23°28'25", Nutation = - 0°00'08", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°49'32", Lahiri = 19°56'33Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1719

geocentric

SEPTEMBER 1719

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	22 38 8	7 ^h 51'31"	1 ^h 33'	4 ^h 46'	24 ^h 46' 3	2 ^h R51	14 ^h 10'	8 ^h 59'	8 ^h 43'	20 ^h R30	16 ^h 23'	27 ^h R49	27 ^h Ω 1	16 ^h Y30	14 ^h R59	F 1
S 2	22 42 5	8 ^h 49'41"	13 ^h 25'	5 ^h 47'	25 ^h ° 1	2 ^h 36'	14 ^h 22'	9 ^h ° 4	8 ^h 47'	20 ^h 30'	16 ^h 25'	27 ^h Ω47	26 ^h 58'	16 ^h 36'	14 ^h 36'	S 2
S 3	22 46 1	9 ^h 47'53"	25 ^h 16'	6 ^h 45'	25 ^h 58'	2 ^h 21'	14 ^h 35'	9 ^h ° 8	8 ^h 50'	20 ^h 30'	16 ^h 27'	27 ^h 46'	26 ^h 55'	16 ^h 43'	14 ^h 53'	S 3
M 4	22 49 58	10 ^h 46'06"	7 ^h 8'	7 ^h 40'	26 ^h 56'	2 ^h ° 6	14 ^h 48'	9 ^h 13'	8 ^h 54'	20 ^h 29'	16 ^h 29'	27 ^h 44'	26 ^h 52'	16 ^h 50'	14 ^h 51'	M 4
T 5	22 53 55	11 ^h 44'22"	19 ^h ° 2	8 ^h 33'	27 ^h 52'	1 ^h 51'	15 ^h ° 1	9 ^h 18'	8 ^h 57'	20 ^h 29'	16 ^h 31'	27 ^h 42'	26 ^h 49'	16 ^h 56'	14 ^h 48'	T 5
W 6	22 57 51	12 ^h 42'39"	1 ^h 11' 6	9 ^h 22'	28 ^h 49'	1 ^h 37'	15 ^h 14'	9 ^h 23'	9 ^h ° 0	20 ^h 28'	16 ^h 34'	27 ^h 41'	26 ^h 45'	17 ^h ° 3	14 ^h 45'	W 6
T 7	23 1 48	13 ^h 40'59"	13 ^h 22'	10 ^h ° 8	29 ^h 44'	1 ^h 23'	15 ^h 27'	9 ^h 28'	9 ^h ° 4	20 ^h 28'	16 ^h 36'	27 ^h D41	26 ^h 42'	17 ^h 10'	14 ^h 42'	T 7
F 8	23 5 44	14 ^h 39'21"	25 ^h 56'	10 ^h 51'	0 ^h 14'40	1 ^h 10'	15 ^h 40'	9 ^h 33'	9 ^h ° 7	20 ^h 28'	16 ^h 38'	27 ^h 41'	26 ^h 39'	17 ^h 16'	14 ^h 39'	F 8
S 9	23 9 41	15 ^h 37'45"	8 ^h 55'	11 ^h 30'	1 ^h 35'	0 ^h 57'	15 ^h 53'	9 ^h 38'	9 ^h 11'	20 ^h 27'	16 ^h 40'	27 ^h 42'	26 ^h 36'	17 ^h 23'	14 ^h 36'	S 9
S 10	23 13 37	16 ^h 36'12"	22 ^h ° 9	12 ^h ° 4	2 ^h 29'	0 ^h 45'	16 ^h ° 6	9 ^h 43'	9 ^h 15'	20 ^h 27'	16 ^h 42'	27 ^h 44'	26 ^h 33'	17 ^h 30'	14 ^h 33'	S 10
M 11	23 17 34	17 ^h 34'40"	5 ^h Ω55	12 ^h 35'	3 ^h 23'	0 ^h 33'	16 ^h 19'	9 ^h 48'	9 ^h 18'	20 ^h 26'	16 ^h 44'	27 ^h 45'	26 ^h 29'	17 ^h 37'	14 ^h 31'	M 11
T 12	23 21 30	18 ^h 33'10"	20 ^h ° 6	13 ^h ° 0	4 ^h 16'	0 ^h 22'	16 ^h 32'	9 ^h 54'	9 ^h 22'	20 ^h 25'	16 ^h 47'	27 ^h 46'	26 ^h 26'	17 ^h 43'	14 ^h 28'	T 12
W 13	23 25 27	19 ^h 31'43"	4 ^h 11'42	13 ^h 21'	5 ^h ° 9	0 ^h 12'	16 ^h 45'	9 ^h 59'	9 ^h 25'	20 ^h 25'	16 ^h 49'	27 ^h R46	26 ^h 23'	17 ^h 50'	14 ^h 25'	W 13
T 14	23 29 24	20 ^h 30'17"	19 ^h 36'	13 ^h 36'	6 ^h ° 1	0 ^h ° 2	16 ^h 58'	10 ^h ° 5	9 ^h 29'	20 ^h 24'	16 ^h 51'	27 ^h 45'	26 ^h 20'	17 ^h 57'	14 ^h 22'	T 14
F 15	23 33 20	21 ^h 28'53"	4 ^h 41'	13 ^h 46'	6 ^h 52'	29 ^h 52'	17 ^h 11'	10 ^h 10'	9 ^h 33'	20 ^h 24'	16 ^h 53'	27 ^h 42'	26 ^h 17'	18 ^h ° 3	14 ^h 19'	F 15
S 16	23 37 17	22 ^h 27'31"	19 ^h 48'	13 ^h R49	7 ^h 43'	29 ^h 44'	17 ^h 24'	10 ^h 16'	9 ^h 36'	20 ^h 23'	16 ^h 55'	27 ^h 39'	26 ^h 14'	18 ^h 10'	14 ^h 16'	S 16
S 17	23 41 13	23 ^h 26'11"	4 ^h 11'47	13 ^h 46'	8 ^h 33'	29 ^h 36'	17 ^h 37'	10 ^h 21'	9 ^h 40'	20 ^h 22'	16 ^h 58'	27 ^h 36'	26 ^h 10'	18 ^h 17'	14 ^h 13'	S 17
M 18	23 45 10	24 ^h 24'53"	19 ^h 30'	13 ^h 36'	9 ^h 22'	29 ^h 29'	17 ^h 50'	10 ^h 27'	9 ^h 44'	20 ^h 21'	17 ^h ° 0	27 ^h 33'	26 ^h ° 7	18 ^h 23'	14 ^h 11'	M 18
T 19	23 49 6	25 ^h 23'37"	3 ^h 17'52	13 ^h 19'	10 ^h 11'	29 ^h 23'	18 ^h ° 3	10 ^h 32'	9 ^h 47'	20 ^h 21'	17 ^h ° 2	27 ^h 30'	26 ^h ° 4	18 ^h 30'	14 ^h ° 8	T 19
W 20	23 53 3	26 ^h 22'22"	17 ^h 50'	12 ^h 55'	10 ^h 59'	29 ^h 18'	18 ^h 16'	10 ^h 38'	9 ^h 51'	20 ^h 20'	17 ^h ° 4	27 ^h 28'	26 ^h ° 1	18 ^h 37'	14 ^h ° 5	W 20
T 21	23 56 59	27 ^h 21'09"	1 ^h 32'23	12 ^h 23'	11 ^h 46'	29 ^h 13'	18 ^h 29'	10 ^h 44'	9 ^h 55'	20 ^h 19'	17 ^h ° 6	27 ^h D28	25 ^h 58'	18 ^h 43'	14 ^h ° 2	T 21
F 22	0 0 56	28 ^h 19'57"	14 ^h 33'	11 ^h 45'	12 ^h 32'	29 ^h ° 9	18 ^h 42'	10 ^h 50'	9 ^h 58'	20 ^h 18'	17 ^h ° 8	27 ^h 29'	25 ^h 55'	18 ^h 50'	13 ^h 59'	F 22
S 23	0 4 53	29 ^h 18'48"	27 ^h 23'	10 ^h 59'	13 ^h 18'	29 ^h ° 6	18 ^h 55'	10 ^h 56'	10 ^h ° 2	20 ^h 17'	17 ^h 10'	27 ^h 31'	25 ^h 51'	18 ^h 57'	13 ^h 57'	S 23
S 24	0 8 49	0 ^h 17'40"	9 ^h 56'	10 ^h ° 7	14 ^h ° 2	29 ^h ° 4	19 ^h ° 8	11 ^h ° 2	10 ^h ° 6	20 ^h 16'	17 ^h 13'	27 ^h 32'	25 ^h 48'	19 ^h ° 4	13 ^h 54'	S 24
M 25	0 12 46	1 ^h 16'33"	22 ^h 16'	9 ^h ° 9	14 ^h 46'	29 ^h ° 2	19 ^h 20'	11 ^h ° 8	10 ^h 10'	20 ^h 15'	17 ^h 15'	27 ^h R33	25 ^h 45'	19 ^h 10'	13 ^h 51'	M 25
T 26	0 16 42	2 ^h 15'29"	4 ^h 12'24	8 ^h ° 6	15 ^h 28'	29 ^h D 1	19 ^h 33'	11 ^h 14'	10 ^h 13'	20 ^h 14'	17 ^h 17'	27 ^h 33'	25 ^h 42'	19 ^h 17'	13 ^h 49'	T 26
W 27	0 20 39	3 ^h 14'27"	16 ^h 26'	7 ^h ° 0	16 ^h 10'	29 ^h ° 1	19 ^h 46'	11 ^h 20'	10 ^h 17'	20 ^h 13'	17 ^h 19'	27 ^h 32'	25 ^h 39'	19 ^h 24'	13 ^h 46'	W 27
T 28	0 24 35	4 ^h 13'26"	28 ^h 22'	5 ^h 52'	16 ^h 50'	29 ^h ° 2	19 ^h 59'	11 ^h 26'	10 ^h 21'	20 ^h 12'	17 ^h 21'	27 ^h 28'	25 ^h 35'	19 ^h 30'	13 ^h 43'	T 28
F 29	0 28 32	5 ^h 12'27"	10 ^h Y14	4 ^h 43'	17 ^h 30'	29 ^h ° 4	20 ^h 12'	11 ^h 32'	10 ^h 25'	20 ^h 11'	17 ^h 23'	27 ^h 23'	25 ^h 32'	19 ^h 37'	13 ^h 41'	F 29
S 30	0 32 28	6 ^h 11'31"	22 ^h Y 5	3 ^h 36'	18 ^h 18'	29 ^h 57	20 ^h 24'	11 ^h 39'	10 ^h 28'	20 ^h 10'	17 ^h 25'	27 ^h Ω16	25 ^h Ω29	19 ^h Y44	13 ^h 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	8n38	2s 5	2s56	3s53	2s10	11s33	2s23	16s28	6s26	7n12	1n 2	12s25	2n12	2s52	0n39	16n11	1s47	18n44	14n32	12n15	12n31	2n53	1s15	5n 4			
S 2	8 16	1n50	3 47	4 25	2 19	12 0	2 29	16 31	6 23	7 7	1 2	12 27	2 12	2 53	0 39	16 10	1 47	18 43	14 32	12 16	12 32	2 55	1 16	5 4			
S 3	7 54	5 38	4 27	4 57	2 28	12 27	2 35	16 34	6 21	7 2	1 2	12 29	2 12	2 54	0 39	16 10	1 47	18 42	14 32	12 16	12 34	2 57	1 17	5 4			
M 4	7 32	9 14	4 56	5 27	2 36	12 54	2 41	16 37	6 18	6 57	1 2	12 30	2 12	2 56	0 39	16 10	1 47	18 41	14 32	12 17	12 35	2 59	1 19	5 4			
T 5	7 10	12 29	5 13	5 55	2 45	13 20	2 47	16 40	6 15	6 52	1 2	12 32	2 11	2 57	0 39	16 10	1 47	18 40	14 32	12 17	12 36	3 1	1 20	5 4			
W 6	6 48	15 15	5 16	6 22	2 53	13 46	2 54	16 42	6 12	6 47	1 2	12 34	2 11	2 59	0 39	16 10	1 48	18 39	14 32	12 18	12 37	3 3	1 21	5 3			
T 7	6 26	17 24	5 4	6 48	3 1	14 12	3 0	16 44	6 9	6 42	1 2	12 36	2 11	3 0	0 39	16 10	1 48	18 39	14 32	12 18	12 38	3 5	1 22	5 3			
F 8	6 3	18 46	4 39	7 12	3 9	14 38	3 6	16 45	6 5	6 37	1 2	12 37	2 11	3 1	0 39	16 10	1 48	18 38	14 32	12 18	12 39	3 7	1 23	5 3			
S 9	5 40	19 13	3 58	7 34	3 16	15 3	3 13	16 47	6 2	6 32	1 2	12 39	2 11	3 3	0 39	16 9	1 48	18 37	14 32	12 17	12 40	3 9	1 24	5 3			
S 10	5 18	18 37	3 4	7 54	3 23	15 28	3 19	16 48	5 58	6 27	1 2	12 41	2 10	3 4	0 39	16 9	1 48	18 36	14 32	12 17	12 41	3 11	1 25	5 3			
M11	4 55	16 55	1 58	8 12	3 30	15 52	3 25	16 49	5 54	6 22	1 2	12 43	2 10	3 6	0 39	16 9	1 48	18 35	14 33	12 16	12 42	3 13	1 27	5 3			
T 12	4 32	14 8	0 42	8 27	3 36	16 17	3 32	16 49	5 51	6 17	1 2	12 45	2 10	3 7	0 39	16 9	1 48	18 34	14 33	12 16	12 43	3 15	1 28	5 3			
W13	4 9	10 24	0n38	8 40	3 41	16 40	3 38	16 49	5 47	6 12	1 2	12 47	2 10	3 9	0 39	16 9	1 48	18 34	14 33	12 16	12 44	3 17	1 29	5 3			
T 14	3 46	5 55	1 57	8 51	3 46	17 4	3 44	16 49	5 42	6 6	1 2	12 48	2 10	3 10	0 39	16 8	1 48	18 33	14 33	12 16	12 45	3 19	1 30	5 3			
F 15	3 23	1 2	3 9	8 58	3 50	17 27	3 51	16 48	5 38	6 1	1 2	12 50	2 9	3 11	0 39	16 8	1 48	18 32	14 33	12 17	12 47	3 21	1 31	5 3			
S 16	3 0	3s55	4 8	9 2	3 53	17 50	3 57	16 47	5 34	5 56	1 2	12 52	2 9	3 13	0 39	16 8	1 48	18 31	14 33	12 18	12 48	3 23	1 33	5 3			
S 17	2 37	8 35	4 49	9 3	3 55	18 12	4 3	16 46	5 30	5 51	1 2	12 54	2 9	3 14	0 39	16 8	1 48	18 31	14 33	12 19	12 49	3 25	1 34	5 3			
M18	2 13	12 39	5 11	9 0	3 56	18 34	4 9	16 44	5 25	5 46	1 2	12 56	2 9	3 16	0 39	16 7	1 48	18 30	14 33	12 21	12 50	3 27	1 35	5 2			
T 19	1 50	15 51	5 12	8 53	3 55	18 56	4 15	16 42	5 21	5 41	1 3	12 58	2 9	3 17	0 39	16 7	1 48	18 29	14 33	12 22	12 51	3 29	1 36	5 2			
W20	1 27	18 2	4 54	8 41	3 54	19 17	4 22	16 40	5 16	5 36	1 3	13 0	2 9	3 19	0 39	16 7	1 48	18 28	14 33	12 22	12 52	3 31	1 37	5 2			
T 21	1 3	19 7	4 21	8 26	3 50	19 38	4 28	16 37	5 11	5 31	1 3	13 2	2 8	3 20	0 39	16 7	1 48	18 28	14 34	12 22	12 53	3 33	1 38	5 2			
F 22	0 40	19 8	3 34	8 6	3 45	19 58	4 34	16 34	5 7	5 26	1 3	13 4	2 8	3 22	0 39	16 6	1 48	18 27	14 34	12 22	12 54	3 35	1 40	5 2			
S 23	0 16	18 8	2 38	7 42	3 38	20 18	4 40	16 31	5 2	5 21	1 3	13 6	2 8	3 23	0 39	16 6	1 48	18 26	14 34	12 21	12 55	3 37	1 41	5 2			
S 24	0s 7	16 16	1 35	7 13	3 29	20 37	4 46	16 27	4 57	5 16	1 3	13 8	2 8	3 25	0 39	16 6	1 48	18 25	14 34	12 21	12 56	3 39	1 42	5 2			
M25	0 30	13 39	0 29	6 40	3 19	20 56	4 52	16 24	4 53	5 11	1 3	13 10	2 8	3 26	0 39	16 5	1 48	18 25	14 34	12 20	12 57	3 41	1 43	5 1			
T 26	0 54	10 29	0s37	6 4	3 6	21 14	4 58	16 19	4 48	5 6	1 3	13 12	2 8	3 28	0 39	16 5	1 49	18 24	14 34	12 20	12 58	3 43	1 44	5 1			
W27	1 17	6 55	1 41	5 24	2 51	21 32	5 3	16 15	4 43	5 1	1 3	13 14	2 7	3 29	0 39	16 5	1 49	18 23	14 34	12 21	12 59	3 45	1 46	5 1			
T 28	1 41	3 6	2 40	4 43	2 35	21 49	5 9	16 10	4 38	4 56	1 3	13 16	2 7	3 31	0 39	16 5	1 49	18 23	14 35	12 22	13 1	3 47	1 47	5 1			
F 29	2 4	0n49	3 31	3 59	2 18	22 6	5 15	16 5	4 34	4 51	1 3	13 18	2 7	3 32	0 39	16 4	1 49	18 22	14 35	12 24	13 2	3 49	1 48	5 1			
S 30	2s28	4n42	4s13	3s15	1s59	22s22	5s20	16s 0	4s29	4n47	1n 3	13s20	2n 7	3s33	0n39	16n 4	1s49	18n21	14n35	12n26	13n 3	3n51	1s49	5n 1			

ASTRODIENST EPHEMERIS for the year 1719

geocentric

OCTOBER 1719

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 36 25	7♏10'37	3♏56	2°R32	18♏45	29♏10	20♏37	11♏45	10♏32	20°R 9	17♏27	27°R 8	25♏26	19♏50	13°R36	S 1
M 2	0 40 21	8° 9'44	15°49	1♏34	19°21	29°14	20°50	11°51	10°36	20♏8	17°29	27♏1	25°23	19°57	13♏33	M 2
T 3	0 44 18	9° 8'55	27°47	0°42	19°55	29°19	21° 2	11°58	10°40	20° 7	17°32	26°54	25°20	20° 4	13°30	T 3
W 4	0 48 15	10° 8'07	9♏52	29♏58	20°29	29°24	21°15	12° 4	10°44	20° 5	17°34	26°48	25°16	20°10	13°28	W 4
T 5	0 52 11	11° 7'22	22° 8	29°23	21° 1	29°30	21°28	12°10	10°47	20° 4	17°36	26°44	25°13	20°17	13°26	T 5
F 6	0 56 8	12° 6'39	4♏37	28°59	21°31	29°38	21°40	12°17	10°51	20° 3	17°38	26°42	25°10	20°24	13°23	F 6
S 7	1 0 4	13° 5'58	17°26	28°45	22° 0	29°45	21°53	12°23	10°55	20° 2	17°40	26°D42	25° 7	20°31	13°21	S 7
S 8	1 4 1	14° 5'20	0♏37	28°D42	22°27	29°54	22° 5	12°30	10°59	20° 0	17°42	26°43	25° 4	20°37	13°18	S 8
M 9	1 7 57	15° 4'44	14°13	28°50	22°53	0♏3	22°18	12°37	11° 2	19°59	17°44	26°44	25° 0	20°44	13°16	M 9
T 10	1 11 54	16° 4'10	28°17	29° 8	23°17	0°13	22°30	12°43	11° 6	19°58	17°46	26°R45	24°57	20°51	13°14	T 10
W11	1 15 50	17° 3'38	12♏48	29°37	23°40	0°24	22°43	12°50	11°10	19°56	17°48	26°43	24°54	20°57	13°12	W11
T 12	1 19 47	18° 3'09	27°43	0♏15	24° 0	0°35	22°55	12°57	11°14	19°55	17°50	26°40	24°51	21° 4	13° 9	T 12
F 13	1 23 44	19° 2'42	12♏55	1° 1	24°19	0°47	23° 7	13° 3	11°18	19°54	17°52	26°35	24°48	21°11	13° 7	F 13
S 14	1 27 40	20° 2'17	28°13	1°56	24°36	1° 0	23°20	13°10	11°21	19°52	17°53	26°27	24°45	21°17	13° 5	S 14
S 15	1 31 37	21° 1'54	13♏28	2°58	24°51	1°13	23°32	13°17	11°25	19°51	17°55	26°19	24°41	21°24	13° 3	S 15
M16	1 35 33	22° 1'33	28°28	4° 5	25° 4	1°27	23°44	13°24	11°29	19°49	17°57	26°10	24°38	21°31	13° 1	M16
T 17	1 39 30	23° 1'14	13♏5	5°19	25°14	1°42	23°56	13°31	11°33	19°48	17°59	26° 3	24°35	21°38	12°59	T 17
W18	1 43 26	24° 0'56	27°13	6°37	25°23	1°57	24° 8	13°37	11°36	19°46	18° 1	25°58	24°32	21°44	12°57	W18
T 19	1 47 23	25° 0'41	10♏52	7°59	25°29	2°13	24°20	13°44	11°40	19°45	18° 3	25°55	24°29	21°51	12°55	T 19
F 20	1 51 19	26° 0'27	24° 4	9°25	25°33	2°30	24°32	13°51	11°44	19°43	18° 5	25°D54	24°26	21°58	12°53	F 20
S 21	1 55 16	27° 0'14	6♏50	10°53	25°R35	2°47	24°44	13°58	11°47	19°42	18° 6	25°54	24°22	22° 4	12°51	S 21
S 22	1 59 13	28° 0'04	19°17	12°24	25°35	3° 4	24°56	14° 5	11°51	19°40	18° 8	25°55	24°19	22°11	12°49	S 22
M23	2 3 9	28°59'55	1♏28	13°57	25°31	3°23	25° 8	14°12	11°55	19°39	18°10	25°R55	24°16	22°18	12°48	M23
T 24	2 7 6	29°59'47	13°29	15°32	25°26	3°41	25°20	14°19	11°58	19°37	18°12	25°53	24°13	22°24	12°46	T 24
W25	2 11 2	0♏59'42	25°23	17° 8	25°18	4° 1	25°31	14°26	12° 2	19°36	18°13	25°49	24°10	22°31	12°44	W25
T 26	2 14 59	1°59'38	7♏14	18°45	25° 8	4°21	25°43	14°33	12° 6	19°34	18°15	25°42	24° 6	22°38	12°43	T 26
F 27	2 18 55	2°59'36	19° 4	20°22	24°55	4°41	25°55	14°40	12° 9	19°32	18°17	25°33	24° 3	22°45	12°41	F 27
S 28	2 22 52	3°59'35	0♏56	22° 0	24°40	5° 2	26° 6	14°47	12°13	19°31	18°19	25°21	24° 0	22°51	12°40	S 28
S 29	2 26 48	4°59'37	12°51	23°39	24°22	5°23	26°18	14°55	12°16	19°29	18°20	25° 8	23°57	22°58	12°38	S 29
M30	2 30 45	5°59'41	24°50	25°17	24° 2	5°45	26°29	15° 2	12°20	19°28	18°22	24°54	23°54	23° 5	12°37	M30
T 31	2 34 41	6♏59'46	6♏55	26♏56	23♏40	6♏7	26♏40	15♏9	12♏24	19♏26	18♏23	24♏41	23♏51	23♏11	12♏35	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	2s51	8n23	4s44	2s31	1s39	22s38	5s25	15s54	4s24	4n42	1n 3	13s22	2n 7	3s35	0n39	16n 4	1s49
M 2	3 15	11 46	5 3	1 49	1 19	22 53	5 31	15 48	4 19	4 37	1 3	13 24	2 7	3 36	0 39	16 3	1 49
T 3	3 38	14 41	5 9	1 10	0 58	23 8	5 36	15 42	4 15	4 32	1 3	13 26	2 7	3 38	0 39	16 3	1 49
W 4	4 1	17 0	5 1	0 34	0 38	23 22	5 41	15 36	4 10	4 27	1 4	13 28	2 7	3 39	0 39	16 2	1 49
T 5	4 24	18 35	4 39	0 2	0 18	23 35	5 46	15 29	4 5	4 22	1 4	13 30	2 6	3 41	0 39	16 2	1 49
F 6	4 48	19 20	4 4	0n25	0n 1	23 48	5 50	15 22	4 0	4 17	1 4	13 32	2 6	3 42	0 39	16 2	1 49
S 7	5 11	19 6	3 16	0 47	0 19	24 0	5 55	15 15	3 56	4 12	1 4	13 35	2 6	3 44	0 39	16 1	1 49
S 8	5 34	17 50	2 16	1 4	0 35	24 11	5 59	15 8	3 51	4 7	1 4	13 37	2 6	3 45	0 39	16 1	1 49
M 9	5 57	15 31	1 7	1 14	0 51	24 22	6 3	15 0	3 47	4 2	1 4	13 39	2 6	3 47	0 39	16 1	1 49
T 10	6 20	12 13	0n 8	1 20	1 4	24 32	6 7	14 52	3 42	3 58	1 4	13 41	2 6	3 48	0 39	16 0	1 49
W11	6 43	8 5	1 25	1 20	1 17	24 41	6 10	14 44	3 38	3 53	1 4	13 43	2 6	3 50	0 39	16 0	1 49
T 12	7 5	3 20	2 39	1 14	1 27	24 49	6 13	14 36	3 33	3 48	1 4	13 45	2 6	3 51	0 39	15 59	1 49
F 13	7 28	1s42	3 42	1 4	1 37	24 57	6 16	14 27	3 29	3 43	1 4	13 47	2 5	3 53	0 39	15 59	1 49
S 14	7 51	6 39	4 30	0 50	1 44	25 4	6 19	14 19	3 24	3 38	1 4	13 49	2 5	3 54	0 39	15 59	1 49
S 15	8 13	11 10	4 58	0 31	1 51	25 10	6 22	14 10	3 20	3 34	1 5	13 51	2 5	3 56	0 39	15 58	1 49
M16	8 35	14 53	5 5	0 8	1 56	25 15	6 24	14 1	3 15	3 29	1 5	13 54	2 5	3 57	0 39	15 58	1 49
T 17	8 58	17 34	4 52	0s17	1 59	25 20	6 25	13 52	3 11	3 24	1 5	13 56	2 5	3 59	0 39	15 57	1 49
W18	9 20	19 5	4 22	0 46	2 2	25 23	6 27	13 42	3 7	3 20	1 5	13 58	2 5	4 0	0 39	15 57	1 49
T 19	9 42	19 25	3 37	1 17	2 3	25 25	6 27	13 32	3 3	3 15	1 5	14 0	2 5	4 2	0 39	15 57	1 49
F 20	10 4	18 40	2 42	1 50	2 4	25 27	6 28	13 23	2 59	3 10	1 5	14 2	2 5	4 3	0 39	15 56	1 49
S 21	10 25	16 58	1 40	2 25	2 4	25 27	6 28	13 13	2 55	3 6	1 5	14 4	2 5	4 4	0 39	15 56	1 49
S 22	10 47	14 30	0 35	3 2	2 2	25 27	6 27	13 2	2 51	3 1	1 5	14 6	2 5	4 6	0 39	15 55	1 49
M23	11 8	11 26	0s30	3 40	2 1	25 25	6 26	12 52	2 47	2 56	1 6	14 9	2 5	4 7	0 39	15 55	1 49
T 24	11 29	7 55	1 32	4 18	1 58	25 22	6 25	12 42	2 43	2 52	1 6	14 11	2 4	4 9	0 39	15 54	1 49
W25	11 50	4 8	2 30	4 58	1 55	25 18	6 22	12 31	2 39	2 47	1 6	14 13	2 4	4 10	0 39	15 54	1 49
T 26	12 11	0 12	3 21	5 38	1 51	25 12	6 20	12 20	2 35	2 43	1 6	14 15	2 4	4 12	0 39	15 54	1 49
F 27	12 32	3n44	4 3	6 19	1 47	25 6	6 16	12 9	2 31	2 38	1 6	14 17	2 4	4 13	0 39	15 53	1 50
S 28	12 52	7 31	4 35	7 0	1 43	24 58	6 12	11 58	2 27	2 34	1 6	14 19	2 4	4 14	0 39	15 53	1 50
S 29	13 12	11 2	4 54	7 41	1 38	24 49	6 7	11 47	2 24	2 29	1 6	14 21	2 4	4 16	0 39	15 52	1 50
M30	13 32	14 8	5 1	8 22	1 33	24 39	6 2	11 35	2 20	2 25	1 6	14 23	2 4	4 17	0 39	15 52	1 50
T 31	13s52	16n39	4s54	9s 2	1n27	24s27	5s56	11s24	2s16	2n21	1n 7	14s26	2n 4	4s18	0n39	15n51	1s50

Julian Day Number = 2349184.5, Delta T = 10.48 sec
 Ecliptic obliquity = 23°28'26", Nutation = - 0°00'11", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°49'41", Lahiri = 19°56'41"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1719

geocentric

NOVEMBER 1719

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	2 38 38	7♎59°54	19♏ 7	28♏35	23°R16	6♏30	26♏52	15♎16	12♏27	19°R24	18♏25	24°R31	23♏47	23°Y18	12°R34	W 1
T 2	2 42 35	9° 0'04	1♏28	0♎14	22♎50	6°53	27° 3	15°23	12°31	19°R23	18°26	24°R22	23°44	23°25	12°R33	T 2
F 3	2 46 31	10° 0'15	14° 0	1°52	22°21	7°16	27°14	15°30	12°34	19°21	18°28	24°17	23°41	23°32	12°32	F 3
S 4	2 50 28	11° 0'29	26°48	3°31	21°52	7°40	27°25	15°37	12°37	19°19	18°30	24°14	23°38	23°38	12°30	S 4
S 5	2 54 24	12° 0'45	9♏53	5° 9	21°20	8° 5	27°36	15°44	12°41	19°18	18°31	24°D14	23°35	23°45	12°29	S 5
M 6	2 58 21	13° 1'03	23°20	6°47	20°47	8°29	27°47	15°52	12°44	19°16	18°32	24°R14	23°32	23°52	12°28	M 6
T 7	3 2 17	14° 1'22	7♏11	8°24	20°13	8°54	27°57	15°59	12°48	19°14	18°34	24°13	23°28	23°58	12°27	T 7
W 8	3 6 14	15° 1'44	21°28	10° 2	19°38	9°20	28° 8	16° 6	12°51	19°13	18°35	24°11	23°25	24° 5	12°26	W 8
T 9	3 10 10	16° 2'08	6♏ 8	11°39	19° 3	9°46	28°19	16°13	12°54	19°11	18°37	24° 6	23°22	24°12	12°25	T 9
F 10	3 14 7	17° 2'33	21° 9	13°16	18°27	10°12	28°29	16°20	12°58	19° 9	18°38	23°59	23°19	24°18	12°25	F 10
S 11	3 18 4	18° 3'01	6♎21	14°53	17°50	10°39	28°40	16°27	13° 1	19° 7	18°39	23°49	23°16	24°25	12°24	S 11
S 12	3 22 0	19° 3'30	21°34	16°29	17°14	11° 5	28°50	16°35	13° 4	19° 6	18°41	23°37	23°12	24°32	12°23	S 12
M13	3 25 57	20° 4'00	6♏37	18° 5	16°38	11°33	29° 1	16°42	13° 7	19° 4	18°42	23°25	23° 9	24°39	12°22	M13
T 14	3 29 53	21° 4'33	21°21	19°41	16° 2	12° 0	29°11	16°49	13°11	19° 2	18°43	23°15	23° 6	24°45	12°22	T 14
W15	3 33 50	22° 5'06	5♏39	21°16	15°27	12°28	29°21	16°56	13°14	19° 1	18°44	23° 7	23° 3	24°52	12°21	W15
T 16	3 37 46	23° 5'41	19°26	22°51	14°53	12°56	29°31	17° 3	13°17	18°59	18°46	23° 1	23° 0	24°59	12°21	T 16
F 17	3 41 43	24° 6'18	2♏44	24°26	14°21	13°25	29°41	17°10	13°20	18°57	18°47	22°58	22°57	25° 5	12°20	F 17
S 18	3 45 40	25° 6'55	15°35	26° 1	13°49	13°54	29°51	17°17	13°23	18°56	18°48	22°57	22°53	25°12	12°20	S 18
S 19	3 49 36	26° 7'34	28° 3	27°36	13°20	14°23	0♏ 0	17°25	13°26	18°54	18°49	22°57	22°50	25°19	12°20	S 19
M20	3 53 33	27° 8'13	10♏14	29°10	12°52	14°52	0°10	17°32	13°29	18°52	18°50	22°57	22°47	25°26	12°20	M20
T 21	3 57 29	28° 8'54	22°13	0♏45	12°26	15°22	0°19	17°39	13°32	18°51	18°51	22°55	22°44	25°32	12°19	T 21
W22	4 1 26	29° 9'36	4°Y 5	2°19	12° 1	15°52	0°29	17°46	13°35	18°49	18°52	22°50	22°41	25°39	12°19	W22
T 23	4 5 22	0♏10'19	15°54	3°53	11°40	16°22	0°38	17°53	13°38	18°47	18°53	22°43	22°37	25°46	12°19	T 23
F 24	4 9 19	1°11'03	27°45	5°26	11°20	16°52	0°47	18° 0	13°41	18°46	18°54	22°33	22°34	25°52	12°D19	F 24
S 25	4 13 15	2°11'48	9♏40	7° 0	11° 3	17°23	0°56	18° 7	13°44	18°44	18°55	22°21	22°31	25°59	12°19	S 25
S 26	4 17 12	3°12'35	21°41	8°34	10°48	17°54	1° 5	18°14	13°47	18°42	18°56	22° 6	22°28	26° 6	12°19	S 26
M27	4 21 8	4°13'22	3♏49	10° 7	10°35	18°25	1°14	18°21	13°49	18°41	18°57	21°52	22°25	26°12	12°19	M27
T 28	4 25 5	5°14'11	16° 6	11°41	10°26	18°56	1°23	18°28	13°52	18°39	18°57	21°38	22°22	26°19	12°20	T 28
W29	4 29 2	6°15'01	28°31	13°14	10°18	19°28	1°32	18°35	13°55	18°37	18°58	21°27	22°18	26°26	12°20	W29
T 30	4 32 58	7♏15'53	11♏ 6	14°48	10♎13	20♏ 0	1°40	18°42	13°57	18°36	18♏59	21°R18	22°R15	26°Y33	12°R20	T 30

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	14s12	18n28	4s34	9s43	1n21	24s14	5s49	11s12	2s13	2n16	1n 7	14s28	2n 4	4s20	0n39	15n51	1s50	18n 7	14n45	13n22	13n37	4n56	2s21	4n53	
T 2	14 31	19 27	4 1	10 23	1 15	24 0	5 41	11 0	2 9	2 12	1 7	14 30	2 4	4 21	0 39	15 50	1 50	18 6	14 45	13 25	13 38	4 59	2 22	4 52	
F 3	14 50	19 29	3 16	11 3	1 9	23 44	5 33	10 48	2 6	2 8	1 7	14 32	2 4	4 23	0 39	15 50	1 50	18 6	14 46	13 27	13 39	5 1	2 22	4 52	
S 4	15 9	18 32	2 20	11 43	1 3	23 28	5 24	10 36	2 3	2 3	1 7	14 34	2 4	4 24	0 39	15 49	1 50	18 6	14 46	13 28	13 40	5 3	2 23	4 52	
S 5	15 28	16 35	1 15	12 22	0 57	23 10	5 14	10 24	1 59	1 59	1 7	14 36	2 4	4 25	0 39	15 49	1 50	18 6	14 46	13 28	13 41	5 5	2 24	4 51	
M 6	15 46	13 41	0 5	13 1	0 50	22 51	5 3	10 11	1 56	1 55	1 7	14 38	2 4	4 27	0 39	15 49	1 50	18 6	14 47	13 28	13 42	5 7	2 24	4 51	
T 7	16 4	9 56	1n 8	13 39	0 43	22 31	4 52	9 59	1 53	1 51	1 8	14 40	2 4	4 28	0 39	15 48	1 50	18 5	14 47	13 28	13 43	5 9	2 25	4 51	
W 8	16 22	5 31	2 19	14 16	0 37	22 10	4 40	9 46	1 50	1 47	1 8	14 42	2 4	4 29	0 39	15 48	1 50	18 5	14 48	13 29	13 44	5 11	2 26	4 50	
T 9	16 40	0 39	3 22	14 53	0 30	21 48	4 28	9 34	1 46	1 43	1 8	14 44	2 4	4 30	0 39	15 47	1 50	18 5	14 48	13 30	13 45	5 13	2 26	4 50	
F 10	16 57	4s21	4 13	15 28	0 23	21 25	4 15	9 21	1 43	1 39	1 8	14 46	2 4	4 32	0 39	15 47	1 50	18 5	14 49	13 33	13 46	5 15	2 27	4 50	
S 11	17 14	9 8	4 47	16 4	0 16	21 2	4 1	9 8	1 40	1 35	1 8	14 48	2 4	4 33	0 39	15 46	1 50	18 5	14 49	13 36	13 47	5 17	2 28	4 49	
S 12	17 31	13 21	5 0	16 38	0 10	20 38	3 47	8 55	1 37	1 31	1 8	14 51	2 4	4 34	0 39	15 46	1 50	18 5	14 50	13 40	13 48	5 19	2 28	4 49	
M13	17 47	16 38	4 52	17 12	0 3	20 14	3 33	8 42	1 34	1 27	1 9	14 53	2 4	4 35	0 39	15 45	1 50	18 5	14 50	13 44	13 49	5 21	2 29	4 49	
T 14	18 3	18 47	4 25	17 44	0s 4	19 49	3 18	8 29	1 31	1 23	1 9	14 55	2 3	4 37	0 39	15 45	1 50	18 5	14 50	13 47	13 50	5 23	2 29	4 48	
W15	18 19	19 39	3 42	18 16	0 10	19 25	3 3	8 15	1 29	1 19	1 9	14 57	2 3	4 38	0 39	15 44	1 50	18 4	14 51	13 50	13 51	5 25	2 30	4 48	
T 16	18 34	19 18	2 47	18 47	0 17	19 0	2 48	8 2	1 26	1 15	1 9	14 59	2 3	4 39	0 39	15 44	1 50	18 4	14 51	13 52	13 52	5 27	2 30	4 48	
F 17	18 50	17 53	1 45	19 17	0 24	18 35	2 32	7 48	1 23	1 11	1 9	15 1	2 3	4 40	0 39	15 44	1 50	18 4	14 52	13 53	13 53	5 29	2 31	4 47	
S 18	19 4	15 34	0 39	19 47	0 30	18 11	2 17	7 35	1 20	1 8	1 10	15 3	2 3	4 41	0 39	15 43	1 50	18 4	14 52	13 53	13 54	5 31	2 31	4 47	
S 19	19 19	12 35	0s27	20 15	0 37	17 47	2 1	7 21	1 17	1 4	1 10	15 5	2 3	4 43	0 39	15 43	1 50	18 4	14 53	13 53	13 55	5 33	2 32	4 47	
M20	19 33	9 8	1 30	20 42	0 43	17 24	1 46	7 7	1 15	1 0	1 10	15 7	2 3	4 44	0 39	15 42	1 50	18 4	14 53	13 53	13 56	5 35	2 32	4 46	
T 21	19 47	5 22	2 28	21 8	0 49	17 1	1 30	6 53	1 12	0 57	1 10	15 9	2 3	4 45	0 39	15 42	1 50	18 4	14 54	13 54	13 57	5 37	2 32	4 46	
W22	20 0	1 25	3 19	21 33	0 55	16 39	1 15	6 39	1 10	0 53	1 10	15 11	2 3	4 46	0 39	15 41	1 50	18 5	14 54	13 55	13 59	5 39	2 33	4 46	
T 23	20 13	2n33	4 1	21 57	1 1	16 18	1 0	6 25	1 7	0 49	1 10	15 13	2 3	4 47	0 39	15 41	1 50	18 5	14 55	13 58	14 0	5 41	2 33	4 45	
F 24	20 26	6 26	4 33	22 20	1 7	15 58	0 45	6 11	1 5	0 46	1 11	15 14	2 3	4 48	0 39	15 40	1 49	18 5	14 55	14 1	14 1	5 43	2 33	4 45	
S 25	20 38	10 6	4 53	22 42	1 13	15 39	0 31	5 57	1 2	0 43	1 11	15 16	2 4	4 49	0 39	15 40	1 49	18 5	14 56	14 5	14 2	5 45	2 34	4 45	
S 26	20 50	13 23	5 0	23 3	1 18	15 21	0 16	5 42	1 0	0 39	1 11	15 18	2 4	4 50	0 39	15 40	1 49	18 5	14 56	14 10	14 3	5 47	2 34	4 44	
M27	21 1	16 8	4 54	23 23	1 24	15 4	0 2	5 28	0 57	0 36	1 11	15 20	2 4	4 51	0 39	15 39	1 49	18 5	14 57	14 14	14 4	5 49	2 34	4 44	
T 28	21 12	18 13	4 34	23 41	1 29	14 48	0n11	5 13	0 55	0 33	1 11	15 22	2 4	4 52	0 39	15 39	1 49	18 5	14 57	14 19	14 5	5 51	2 34	4 44	
W29	21 23	19 28	4 0	23 58	1 34	14 33	0 24	4 59	0 53	0 29	1 12	15 24	2 4	4 53	0 39	15 38	1 49	18 5	14 58	14 22	14 6	5 54	2 35	4 43	
T 30	21s33	19n46	3s15	24s14	1s39	14s19	0n37	4s44	0s50	0n26	1n12	15s26	2n 4	4s54	0n39	15n38	1s49	18n 5	14n58	14n25	14n 7	5n56	2s35	4n43	

ASTRODIENST EPHEMERIS for the year 1719
geocentric

DECEMBER 1719

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
F 1	4 36 55	8♌16'45	23♋51	16♊21	10°D11	20♏32	1♌48	18♎49	14♏0	18°R34	19♏0	21°R12	22♏12	26♏39	12♏21	F 1
S 2	4 40 51	9°17'39	6♏47	17°55	10♎11	21° 4	1°57	18°56	14° 2	18♏33	19° 0	21♏9	22° 9	26°46	12°21	S 2
S 3	4 44 48	10°18'34	19°58	19°28	10°13	21°36	2° 5	19° 3	14° 5	18°31	19° 1	21°D 8	22° 6	26°53	12°22	S 3
M 4	4 48 44	11°19'31	3♏24	21° 1	10°18	22° 9	2°13	19° 9	14° 7	18°30	19° 2	21° 8	22° 3	26°59	12°22	M 4
T 5	4 52 41	12°20'28	17° 7	22°34	10°26	22°41	2°21	19°16	14°10	18°28	19° 2	21°R 9	21°59	27° 6	12°23	T 5
W 6	4 56 38	13°21'27	1♌10	24° 7	10°35	23°14	2°28	19°23	14°12	18°27	19° 3	21° 7	21°56	27°13	12°24	W 6
T 7	5 0 34	14°22'27	15°32	25°41	10°47	23°47	2°36	19°30	14°15	18°25	19° 3	21° 4	21°53	27°20	12°24	T 7
F 8	5 4 31	15°23'28	0♎10	27°14	11° 1	24°20	2°44	19°36	14°17	18°24	19° 4	20°57	21°50	27°26	12°25	F 8
S 9	5 8 27	16°24'31	15° 0	28°46	11°17	24°54	2°51	19°43	14°19	18°22	19° 4	20°49	21°47	27°33	12°26	S 9
S 10	5 12 24	17°25'34	29°53	0♊19	11°35	25°27	2°58	19°50	14°21	18°21	19° 5	20°39	21°43	27°40	12°27	S 10
M 11	5 16 20	18°26'38	14♏42	1°52	11°55	26° 1	3° 5	19°56	14°24	18°19	19° 5	20°29	21°40	27°46	12°28	M 11
T 12	5 20 17	19°27'43	29°16	3°24	12°17	26°35	3°12	20° 3	14°26	18°18	19° 5	20°19	21°37	27°53	12°29	T 12
W 13	5 24 13	20°28'49	13♊30	4°56	12°41	27° 9	3°19	20° 9	14°28	18°16	19° 6	20°12	21°34	28° 0	12°30	W 13
T 14	5 28 10	21°29'55	27°19	6°27	13° 7	27°43	3°26	20°16	14°30	18°15	19° 6	20° 7	21°31	28° 7	12°31	T 14
F 15	5 32 7	22°31'02	10♏40	7°58	13°34	28°18	3°32	20°22	14°32	18°14	19° 6	20° 4	21°28	28°13	12°32	F 15
S 16	5 36 3	23°32'09	23°36	9°29	14° 3	28°52	3°38	20°29	14°34	18°12	19° 7	20°D 4	21°24	28°20	12°34	S 16
S 17	5 40 0	24°33'16	6♏9	10°58	14°34	29°27	3°45	20°35	14°36	18°11	19° 7	20° 5	21°21	28°27	12°35	S 17
M 18	5 43 56	25°34'23	18°24	12°27	15° 6	0♏1	3°51	20°41	14°37	18°10	19° 7	20° 6	21°18	28°33	12°36	M 18
T 19	5 47 53	26°35'31	0♏25	13°55	15°40	0°36	3°56	20°48	14°39	18° 9	19° 7	20°R 6	21°15	28°40	12°38	T 19
W 20	5 51 49	27°36'39	12°18	15°21	16°15	1°11	4° 2	20°54	14°41	18° 7	19° 7	20° 4	21°12	28°47	12°39	W 20
T 21	5 55 46	28°37'46	24° 9	16°45	16°51	1°46	4° 8	21° 0	14°43	18° 6	19° 7	20° 1	21° 9	28°54	12°41	T 21
F 22	5 59 42	29°38'54	6♏1	18° 8	17°29	2°21	4°13	21° 6	14°44	18° 5	19°R 7	19°55	21° 5	29° 0	12°42	F 22
S 23	6 3 39	0♊40'03	17°59	19°28	18° 8	2°57	4°18	21°12	14°46	18° 4	19° 7	19°47	21° 2	29° 7	12°44	S 23
S 24	6 7 36	1°41'11	0♏6	20°46	18°48	3°32	4°24	21°18	14°47	18° 3	19° 7	19°38	20°59	29°14	12°46	S 24
M 25	6 11 32	2°42'19	12°23	22° 0	19°30	4° 8	4°28	21°24	14°49	18° 2	19° 7	19°29	20°56	29°20	12°48	M 25
T 26	6 15 29	3°43'28	24°53	23°11	20°12	4°43	4°33	21°30	14°50	18° 0	19° 7	19°20	20°53	29°27	12°49	T 26
W 27	6 19 25	4°44'36	7♋35	24°17	20°56	5°19	4°38	21°36	14°52	17°59	19° 7	19°13	20°49	29°34	12°51	W 27
T 28	6 23 22	5°45'45	20°29	25°18	21°41	5°55	4°42	21°42	14°53	17°58	19° 7	19° 7	20°46	29°41	12°53	T 28
F 29	6 27 18	6°46'54	3♏35	26°13	22°27	6°31	4°47	21°48	14°54	17°57	19° 7	19° 4	20°43	29°47	12°55	F 29
S 30	6 31 15	7°48'03	16°53	27° 1	23°13	7° 6	4°51	21°54	14°55	17°56	19° 6	19°D 2	20°40	29°54	12°57	S 30
S 31	6 35 11	8♊49'13	0♏21	27♊42	24♎1	7♏43	4♌55	21♎59	14♌56	17♏56	19♏6	19♏3	20♏37	0♏1	12♏59	S 31

Day	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	21s43	19n 5	2s19	24s29	1s43	14s 7	0n49	4s30	0s48	0n23	1n12	15s28	2n 4	4s55	0n39	15n37	1s49	18n 6	14n59	14n27	14n 8	5n58	2s35	4n43	
S 2	21 53	17 23	1 15	24 42	1 47	13 55	1 1	4 15	0 46	0 20	1 12	15 30	2 4	4 56	0 39	15 37	1 49	18 6	14 59	14 28	14 9	6 0	2 35	4 42	
S 3	22 2	14 45	0 6	24 54	1 51	13 45	1 13	4 0	0 44	0 17	1 13	15 31	2 4	4 57	0 39	15 37	1 49	18 6	15 0	14 28	14 10	6 2	2 35	4 42	
M 4	22 10	11 17	1n 5	25 5	1 55	13 36	1 24	3 45	0 42	0 14	1 13	15 33	2 4	4 58	0 39	15 36	1 49	18 6	15 0	14 28	14 11	6 4	2 35	4 42	
T 5	22 18	7 8	2 13	25 15	1 59	13 28	1 34	3 31	0 40	0 11	1 13	15 35	2 4	4 59	0 39	15 36	1 49	18 7	15 1	14 28	14 12	6 6	2 35	4 41	
W 6	22 26	2 32	3 16	25 23	2 2	13 22	1 45	3 16	0 37	0 8	1 13	15 37	2 4	5 0	0 39	15 35	1 49	18 7	15 2	14 29	14 13	6 8	2 35	4 41	
T 7	22 33	2s19	4 7	25 29	2 5	13 16	1 54	3 1	0 35	0 5	1 13	15 38	2 4	5 1	0 40	15 35	1 49	18 7	15 2	14 30	14 14	6 10	2 35	4 41	
F 8	22 40	7 7	4 44	25 34	2 8	13 12	2 4	2 46	0 33	0 2	1 14	15 40	2 4	5 2	0 40	15 35	1 49	18 7	15 3	14 32	14 15	6 12	2 35	4 40	
S 9	22 47	11 33	5 2	25 38	2 10	13 8	2 12	2 31	0 31	0s 0	1 14	15 42	2 4	5 3	0 40	15 34	1 49	18 8	15 3	14 35	14 16	6 14	2 35	4 40	
S 10	22 53	15 17	4 59	25 40	2 12	13 6	2 21	2 16	0 30	0 3	1 14	15 44	2 4	5 4	0 40	15 34	1 49	18 8	15 4	14 38	14 17	6 16	2 35	4 40	
M11	22 58	18 1	4 37	25 41	2 13	13 4	2 29	2 0	0 28	0 6	1 14	15 45	2 4	5 4	0 40	15 34	1 49	18 8	15 4	14 41	14 18	6 18	2 35	4 39	
T 12	23 3	19 32	3 57	25 40	2 15	13 4	2 36	1 45	0 26	0 8	1 15	15 47	2 4	5 5	0 40	15 33	1 49	18 9	15 5	14 44	14 19	6 20	2 35	4 39	
W13	23 8	19 46	3 2	25 38	2 15	13 4	2 43	1 30	0 24	0 11	1 15	15 49	2 4	5 6	0 40	15 33	1 49	18 9	15 5	14 46	14 20	6 22	2 35	4 39	
T 14	23 12	18 47	1 59	25 34	2 15	13 6	2 50	1 15	0 22	0 13	1 15	15 50	2 4	5 7	0 40	15 33	1 49	18 9	15 6	14 48	14 21	6 24	2 35	4 38	
F 15	23 16	16 47	0 50	25 29	2 15	13 8	2 57	0 59	0 20	0 15	1 15	15 52	2 4	5 7	0 40	15 32	1 49	18 10	15 6	14 49	14 22	6 26	2 35	4 38	
S 16	23 19	13 58	0s19	25 22	2 14	13 10	3 3	0 44	0 19	0 18	1 16	15 54	2 4	5 8	0 40	15 32	1 49	18 10	15 7	14 49	14 23	6 28	2 35	4 38	
S 17	23 22	10 35	1 25	25 14	2 13	13 14	3 8	0 29	0 17	0 20	1 16	15 55	2 5	5 9	0 40	15 32	1 49	18 11	15 7	14 49	14 24	6 30	2 34	4 37	
M18	23 24	6 50	2 26	25 4	2 11	13 18	3 13	0 13	0 15	0 22	1 16	15 57	2 5	5 10	0 40	15 31	1 49	18 11	15 8	14 48	14 25	6 32	2 34	4 37	
T 19	23 26	2 53	3 19	24 52	2 8	13 23	3 18	0n 2	0 13	0 24	1 16	15 58	2 5	5 10	0 40	15 31	1 49	18 11	15 8	14 48	14 26	6 34	2 34	4 37	
W20	23 27	1n 8	4 3	24 39	2 5	13 29	3 23	0 18	0 12	0 26	1 17	16 0	2 5	5 11	0 40	15 31	1 49	18 12	15 9	14 49	14 27	6 36	2 34	4 36	
T 21	23 28	5 6	4 36	24 25	2 1	13 35	3 27	0 33	0 10	0 28	1 17	16 1	2 5	5 11	0 40	15 30	1 49	18 12	15 10	14 50	14 28	6 38	2 33	4 36	
F 22	23 28	8 51	4 58	24 10	1 56	13 42	3 31	0 48	0 9	0 30	1 17	16 3	2 5	5 12	0 40	15 30	1 49	18 13	15 10	14 52	14 29	6 40	2 33	4 36	
S 23	23 28	12 18	5 7	23 53	1 50	13 49	3 35	1 4	0 7	0 32	1 17	16 4	2 5	5 13	0 40	15 30	1 49	18 13	15 11	14 54	14 30	6 42	2 33	4 35	
S 24	23 28	15 17	5 2	23 35	1 44	13 57	3 38	1 19	0 5	0 34	1 18	16 6	2 5	5 13	0 40	15 30	1 49	18 14	15 11	14 57	14 31	6 44	2 32	4 35	
M25	23 27	17 38	4 43	23 16	1 36	14 5	3 41	1 35	0 4	0 35	1 18	16 7	2 5	5 14	0 40	15 29	1 48	18 14	15 12	15 0	14 32	6 46	2 32	4 35	
T 26	23 25	19 12	4 10	22 56	1 28	14 14	3 44	1 50	0 2	0 37	1 18	16 9	2 5	5 14	0 40	15 29	1 48	18 15	15 12	15 3	14 33	6 49	2 32	4 35	
W27	23 23	19 51	3 25	22 35	1 19	14 23	3 46	2 6	0 1	0 39	1 18	16 10	2 5	5 15	0 40	15 29	1 48	18 15	15 13	15 5	14 34	6 51	2 31	4 34	
T 28	23 21	19 28	2 28	22 13	1 8	14 32	3 48	2 22	0n 1	0 40	1 19	16 12	2 6	5 15	0 40	15 29	1 48	18 16	15 13	15 7	14 35	6 53	2 31	4 34	
F 29	23 18	18 2	1 23	21 52	0 56	14 42	3 50	2 37	0 2	0 42	1 19	16 13	2 6	5 16	0 40	15 28	1 48	18 16	15 14	15 8	14 36	6 55	2 30	4 34	
S 30	23 15	15 37	0 12	21 30	0 44	14 52	3 52	2 53	0 3	0 43	1 19	16 14	2 6	5 16	0 40	15 28	1 48	18 17	15 14	15 8	14 37	6 57	2 30	4 33	
S 31	23s11	12n19	1n 1	21s 8	0s30	15s 2	3n53	3n 8	0n 5	0s44	1n19	16s16	2n 6	5s17	0n40	15n28	1s48	18n18	15n15	15n 8	14n38	6n59	2s29	4n33	