



# Astrodienst Ephemeris Tables for the year 1991

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 1991  
geocentric

JANUARY 1991

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 40 36	10°3'19	13°14	24°R19	24°343	27°R45	11°R59	25°340	9°344	14°3 7	19°M35	28°R 3	29°3 8	17°A14	25°R16	T 1
W 2	6 44 32	11° 4'27	28°13	23°A57	25°59	27°D45	11°D53	25°47	9°47	14° 9	19°37	28°D 2	29° 5	17°21	25°B12	W 2
T 3	6 48 29	12° 5'35	12°U52	23°45	27°14	27°B46	11°47	25°54	9°51	14°12	19°39	28°3 3	29° 2	17°27	25° 8	T 3
F 4	6 52 25	13° 6'43	27° 7	23°D43	28°29	27°48	11°41	26° 1	9°55	14°14	19°41	28° 4	28°59	17°34	25° 4	F 4
S 5	6 56 22	14° 7'51	10°M55	23°49	29°44	27°50	11°35	26° 8	9°58	14°16	19°42	28° 5	28°55	17°41	25° 0	S 5
S 6	7 0 19	15° 9'00	24°16	24° 4	0°A59	27°53	11°28	26°15	10° 2	14°18	19°44	28° 6	28°52	17°47	24°56	S 6
M 7	7 4 15	16°10'08	7°A12	24°27	2°15	27°56	11°22	26°22	10° 5	14°21	19°45	28° 7	28°49	17°54	24°52	M 7
T 8	7 8 12	17°11'17	19°46	24°56	3°30	28° 1	11°15	26°29	10° 9	14°23	19°47	28°R 7	28°46	18° 1	24°47	T 8
W 9	7 12 8	18°12'26	2°M 2	25°31	4°45	28° 6	11° 8	26°36	10°12	14°25	19°48	28° 6	28°43	18° 7	24°43	W 9
T 10	7 16 5	19°13'35	14° 5	26°12	6° 0	28°12	11° 1	26°43	10°16	14°27	19°50	28° 6	28°39	18°14	24°39	T 10
F 11	7 20 1	20°14'45	26° 0	26°58	7°15	28°19	10°54	26°50	10°20	14°30	19°51	28° 5	28°36	18°21	24°35	F 11
S 12	7 23 58	21°15'54	7°A50	27°48	8°30	28°26	10°47	26°57	10°23	14°32	19°53	28° 3	28°33	18°27	24°30	S 12
S 13	7 27 54	22°17'03	19°38	28°42	9°45	28°34	10°40	27° 4	10°27	14°34	19°54	28° 3	28°30	18°34	24°26	S 13
M14	7 31 51	23°18'12	1°B29	29°40	11° 1	28°42	10°32	27°12	10°30	14°37	19°56	28° 2	28°27	18°41	24°22	M14
T 15	7 35 48	24°19'20	13°24	0°B41	12°16	28°51	10°25	27°19	10°34	14°39	19°57	28° 1	28°24	18°48	24°18	T 15
W16	7 39 44	25°20'28	25°25	1°45	13°31	29° 1	10°17	27°26	10°37	14°41	19°58	28°D 1	28°20	18°54	24°13	W16
T 17	7 43 41	26°21'36	7°A35	2°51	14°46	29°12	10°10	27°33	10°41	14°43	20° 0	28° 1	28°17	19° 1	24° 9	T 17
F 18	7 47 37	27°22'43	19°54	4° 0	16° 1	29°23	10° 2	27°40	10°44	14°46	20° 1	28° 1	28°14	19° 8	24° 5	F 18
S 19	7 51 34	28°23'49	2°K25	5°10	17°16	29°34	9°55	27°47	10°48	14°48	20° 2	28°R 1	28°11	19°14	24° 0	S 19
S 20	7 55 30	29°24'55	15° 9	6°23	18°31	29°47	9°47	27°54	10°51	14°50	20° 3	28° 1	28° 8	19°21	23°56	S 20
M21	7 59 27	0°A26'00	28° 7	7°37	19°46	29°59	9°39	28° 2	10°55	14°52	20° 4	28° 1	28° 5	19°28	23°52	M21
T 22	8 3 23	1°27'04	11°V20	8°53	21° 1	0°B13	9°31	28° 9	10°58	14°54	20° 5	28° 1	28° 1	19°34	23°48	T 22
W23	8 7 20	2°28'07	24°51	10°11	22°16	0°27	9°23	28°16	11° 2	14°57	20° 6	28° 1	27°58	19°41	23°43	W23
T 24	8 11 17	3°29'09	8°B40	11°29	23°31	0°41	9°15	28°23	11° 5	14°59	20° 8	28°D 1	27°55	19°48	23°39	T 24
F 25	8 15 13	4°30'10	22°46	12°49	24°46	0°56	9° 7	28°30	11° 8	15° 1	20° 9	28° 1	27°52	19°54	23°35	F 25
S 26	8 19 10	5°31'09	7°B10	14°11	26° 1	1°11	8°59	28°37	11°12	15° 3	20°10	28° 1	27°49	20° 1	23°31	S 26
S 27	8 23 6	6°32'08	21°47	15°33	27°16	1°27	8°51	28°44	11°15	15° 5	20°10	28° 2	27°45	20° 8	23°26	S 27
M28	8 27 3	7°33'06	6°B33	16°56	28°30	1°44	8°43	28°51	11°18	15° 7	20°11	28° 3	27°42	20°14	23°22	M28
T 29	8 30 59	8°34'03	21°21	18°21	29°45	2° 0	8°35	28°58	11°22	15°10	20°12	28°R 3	27°39	20°21	23°18	T 29
W30	8 34 56	9°34'58	6°U 5	19°46	1°K 0	2°18	8°27	29° 6	11°25	15°12	20°13	28° 3	27°36	20°28	23°14	W30
T 31	8 38 52	10°35'53	20°U38	21°B12	2°K15	2°B35	8°U19	29°B13	11°B28	15°B14	20°M14	28°B 3	27°B33	20°A34	23°B10	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	23s 4	24n 8	1n21	20s11	3n 9	22s27	1s17	21n56	2n20	17n51	0n41	21s 9	0s 9	23s24	0s19	21s54
W 2	22 59	20 30	0s 1	20 12	3 7	22 14	1 18	21 57	2 21	17 53	0 41	21 8	0 9	23 24	0 19	21 54
T 3	22 53	15 39	1 21	20 15	3 3	22 1	1 20	21 57	2 21	17 55	0 41	21 7	0 9	23 24	0 19	21 54
F 4	22 48	10 3	2 34	20 20	2 58	21 47	1 21	21 58	2 22	17 57	0 41	21 5	0 9	23 23	0 19	21 54
S 5	22 42	4 9	3 36	20 26	2 52	21 33	1 22	21 59	2 22	17 59	0 42	21 4	0 9	23 23	0 19	21 54
S 6	22 35	1s45	4 24	20 33	2 45	21 18	1 24	22 0	2 22	18 1	0 42	21 3	0 9	23 23	0 19	21 53
M 7	22 28	7 23	4 56	20 42	2 38	21 2	1 25	22 1	2 23	18 3	0 42	21 2	0 9	23 23	0 19	21 53
T 8	22 20	12 34	5 14	20 51	2 30	20 46	1 26	22 2	2 23	18 5	0 42	21 0	0 9	23 22	0 19	21 53
W 9	22 12	17 7	5 16	21 1	2 21	20 29	1 27	22 4	2 23	18 7	0 42	20 59	0 9	23 22	0 19	21 53
T 10	22 4	20 55	5 5	21 11	2 13	20 11	1 28	22 5	2 23	18 9	0 43	20 58	0 9	23 22	0 19	21 52
F 11	21 55	23 48	4 40	21 21	2 3	19 53	1 29	22 7	2 23	18 11	0 43	20 57	0 9	23 22	0 19	21 52
S 12	21 46	25 38	4 4	21 31	1 54	19 35	1 29	22 8	2 23	18 13	0 43	20 55	0 9	23 21	0 19	21 52
S 13	21 36	26 19	3 17	21 41	1 45	19 15	1 30	22 10	2 23	18 15	0 43	20 54	0 9	23 21	0 19	21 52
M14	21 26	25 48	2 22	21 51	1 35	18 55	1 31	22 12	2 24	18 17	0 43	20 53	0 9	23 21	0 19	21 51
T 15	21 15	24 6	1 20	22 0	1 26	18 35	1 31	22 14	2 24	18 20	0 43	20 51	0 10	23 20	0 19	21 51
W16	21 4	21 18	0 14	22 9	1 17	18 14	1 32	22 17	2 24	18 22	0 44	20 50	0 10	23 20	0 19	21 51
T 17	20 53	17 31	0n53	22 18	1 7	17 53	1 33	22 19	2 24	18 24	0 44	20 49	0 10	23 20	0 19	21 51
F 18	20 41	12 58	1 59	22 25	0 58	17 31	1 33	22 21	2 23	18 26	0 44	20 47	0 10	23 20	0 19	21 50
S 19	20 29	7 49	3 0	22 32	0 49	17 9	1 33	22 24	2 23	18 28	0 44	20 46	0 10	23 19	0 19	21 50
S 20	20 17	2 16	3 53	22 38	0 40	16 46	1 34	22 26	2 23	18 31	0 44	20 45	0 10	23 19	0 19	21 50
M21	20 4	3n28	4 35	22 43	0 31	16 22	1 34	22 29	2 23	18 33	0 44	20 43	0 10	23 19	0 19	21 50
T 22	19 50	9 9	5 4	22 47	0 22	15 59	1 34	22 32	2 23	18 35	0 45	20 42	0 10	23 19	0 19	21 49
W23	19 37	14 32	5 17	22 50	0 13	15 34	1 34	22 34	2 23	18 37	0 45	20 41	0 10	23 18	0 19	21 49
T 24	19 23	19 19	5 12	22 52	0 5	15 10	1 34	22 37	2 23	18 40	0 45	20 39	0 10	23 18	0 19	21 49
F 25	19 8	23 7	4 49	22 53	0s 3	14 45	1 34	22 40	2 23	18 42	0 45	20 38	0 10	23 18	0 19	21 49
S 26	18 54	25 34	4 7	22 53	0 12	14 19	1 34	22 43	2 22	18 44	0 45	20 36	0 10	23 18	0 19	21 49
S 27	18 38	26 19	3 8	22 51	0 19	13 53	1 34	22 46	2 22	18 46	0 45	20 35	0 10	23 17	0 19	21 48
M28	18 23	25 13	1 57	22 49	0 27	13 27	1 33	22 50	2 22	18 49	0 45	20 34	0 11	23 17	0 19	21 48
T 29	18 7	22 21	0 37	22 45	0 34	13 1	1 33	22 53	2 22	18 51	0 45	20 32	0 11	23 17	0 19	21 48
W30	17 51	18 2	0s44	22 40	0 42	12 34	1 33	22 56	2 21	18 53	0 46	20 31	0 11	23 16	0 19	21 48
T 31	17s35	12n41	2s 2	22s34	0s49	12s 7	1s32	22n59	2n21	18n55	0n46	20s30	0s11	23s16	0s20	21s47

Julian Day Number = 2448257.5, Delta T = 57.57 sec  
Ecliptic obliquity = 23°26'30", Nutation = 0°00'15", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 24°36'52", Lahiri = 23°43'53"

# ASTRODIENST EPHEMERIS for the year 1991

## geocentric

FEBRUARY 1991

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	8 42 49	11°36'47	4°52	22°39	3°30	2°54	8°R11	29°20	11°31	15°16	20°15	28°R 1	27°30	20°41	23°R 6	F 1
S 2	8 46 46	12°37'39	18°44	24° 7	4°44	3°12	8° 3	29°27	11°35	15°18	20°15	27°59	27°26	20°48	23° 2	S 2
S 3	8 50 42	13°38'31	2°12	25°35	5°59	3°31	7°55	29°34	11°38	15°20	20°16	27°57	27°23	20°54	22°58	S 3
M 4	8 54 39	14°39'22	15°15	27° 5	7°14	3°51	7°47	29°41	11°41	15°22	20°17	27°55	27°20	21° 1	22°54	M 4
T 5	8 58 35	15°40'12	27°55	28°35	8°28	4°10	7°40	29°48	11°44	15°24	20°17	27°53	27°17	21° 8	22°51	T 5
W 6	9 2 32	16°41'01	10°15	0° 6	9°43	4°31	7°32	29°55	11°47	15°26	20°18	27°52	27°14	21°14	22°47	W 6
T 7	9 6 28	17°41'50	22°21	1°38	10°57	4°51	7°24	0° 1	11°50	15°28	20°19	27°D52	27°11	21°21	22°43	T 7
F 8	9 10 25	18°42'37	4°16	3°11	12°12	5°12	7°16	0° 8	11°53	15°30	20°19	27°53	27° 7	21°28	22°39	F 8
S 9	9 14 21	19°43'23	16° 5	4°44	13°26	5°33	7° 8	0°15	11°56	15°32	20°20	27°55	27° 4	21°34	22°36	S 9
S 10	9 18 18	20°44'09	27°54	6°19	14°41	5°55	7° 1	0°22	11°59	15°34	20°20	27°56	27° 1	21°41	22°32	S 10
M 11	9 22 15	21°44'53	9°34	7°54	15°55	6°17	6°53	0°29	12° 2	15°36	20°20	27°58	26°58	21°48	22°28	M 11
T 12	9 26 11	22°45'36	21°46	9°30	17°10	6°39	6°46	0°36	12° 5	15°38	20°21	27°59	26°55	21°54	22°25	T 12
W 13	9 30 8	23°46'18	3°56	11° 7	18°24	7° 2	6°38	0°43	12° 8	15°40	20°21	27°R59	26°51	22° 1	22°22	W 13
T 14	9 34 4	24°46'59	16°20	12°44	19°39	7°24	6°31	0°49	12°11	15°42	20°21	27°58	26°48	22° 8	22°18	T 14
F 15	9 38 1	25°47'38	28°57	14°23	20°53	7°48	6°24	0°56	12°14	15°44	20°22	27°55	26°45	22°14	22°15	F 15
S 16	9 41 57	26°48'16	11°49	16° 2	22° 7	8°11	6°17	1° 3	12°17	15°45	20°22	27°51	26°42	22°21	22°12	S 16
S 17	9 45 54	27°48'52	24°55	17°42	23°21	8°35	6°10	1° 9	12°20	15°47	20°22	27°46	26°39	22°28	22° 9	S 17
M 18	9 49 50	28°49'26	8°15	19°23	24°36	8°59	6° 3	1°16	12°22	15°49	20°22	27°41	26°36	22°34	22° 5	M 18
T 19	9 53 47	29°49'59	21°47	21° 5	25°50	9°24	5°56	1°23	12°25	15°51	20°22	27°36	26°32	22°41	22° 2	T 19
W 20	9 57 44	0°50'30	5°30	22°48	27° 4	9°48	5°49	1°29	12°28	15°52	20°23	27°32	26°29	22°48	21°59	W 20
T 21	10 1 40	1°50'59	19°23	24°31	28°18	10°13	5°43	1°36	12°31	15°54	20°23	27°30	26°26	22°54	21°57	T 21
F 22	10 5 37	2°51'27	3°25	26°16	29°32	10°38	5°36	1°42	12°33	15°56	20°R23	27°D29	26°23	23° 1	21°54	F 22
S 23	10 9 33	3°51'52	17°34	28° 2	0°46	11° 4	5°30	1°49	12°36	15°58	20°23	27°30	26°20	23° 8	21°51	S 23
S 24	10 13 30	4°52'16	1°49	29°48	2° 0	11°29	5°24	1°55	12°38	15°59	20°23	27°32	26°17	23°14	21°48	S 24
M 25	10 17 26	5°52'37	16° 8	1°36	3°14	11°55	5°18	2° 1	12°41	16° 1	20°22	27°33	26°13	23°21	21°46	M 25
T 26	10 21 23	6°52'57	0°28	3°25	4°28	12°22	5°12	2° 8	12°43	16° 2	20°22	27°R33	26°10	23°28	21°43	T 26
W 27	10 25 19	7°53'15	14°46	5°14	5°42	12°48	5° 6	2°14	12°46	16° 4	20°22	27°32	26° 7	23°34	21°41	W 27
T 28	10 29 16	8°53'31	28°56	7° 5	6°55	13°14	5° 0	2°20	12°48	16° 6	20°22	27°32	26° 4	23°41	21°39	T 28

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	17s18	6n47	3s10	22s27	0s55	11s39	1s32	23n 3	2n21	18n57	0n46	20s28	0s11	23s16	0s20	21s47	0n47	3s11	15n 9	20s34	20s40	26s12	13n59	7s35					
S 2	17 1	0 42	4 5	22 18	1 2	11 11	1 31	23 6	2 21	19 0	0 46	20 27	0 11	23 16	0 20	21 47	0 47	3 10	15 9	20 34	20 40	26 11	14 0	7 35					
S 3	16 44	5s14	4 45	22 8	1 8	10 43	1 30	23 9	2 20	19 2	0 46	20 25	0 11	23 15	0 20	21 47	0 47	3 10	15 10	20 34	20 41	26 11	14 1	7 34					
M 4	16 26	10 45	5 8	21 57	1 14	10 15	1 30	23 13	2 20	19 4	0 46	20 24	0 11	23 15	0 20	21 46	0 47	3 10	15 10	20 35	20 42	26 11	14 2	7 34					
T 5	16 8	15 39	5 16	21 45	1 19	9 46	1 29	23 16	2 20	19 6	0 46	20 23	0 11	23 15	0 20	21 46	0 47	3 10	15 11	20 35	20 42	26 11	14 3	7 34					
W 6	15 50	19 47	5 9	21 31	1 25	9 17	1 28	23 20	2 19	19 8	0 46	20 21	0 11	23 15	0 20	21 46	0 47	3 9	15 11	20 35	20 43	26 10	14 4	7 34					
T 7	15 32	22 59	4 48	21 16	1 30	8 48	1 27	23 23	2 19	19 10	0 46	20 20	0 11	23 14	0 20	21 46	0 47	3 9	15 12	20 35	20 44	26 10	14 4	7 33					
F 8	15 13	25 10	4 15	20 59	1 35	8 18	1 26	23 27	2 19	19 12	0 46	20 18	0 11	23 14	0 20	21 45	0 47	3 9	15 12	20 35	20 44	26 10	14 5	7 33					
S 9	14 54	26 13	3 31	20 41	1 39	7 49	1 25	23 30	2 18	19 14	0 47	20 17	0 11	23 14	0 20	21 45	0 47	3 8	15 13	20 35	20 45	26 10	14 6	7 33					
S 10	14 35	26 4	2 38	20 22	1 43	7 19	1 24	23 34	2 18	19 16	0 47	20 16	0 11	23 14	0 20	21 45	0 47	3 8	15 13	20 35	20 45	26 9	14 7	7 32					
M11	14 16	24 43	1 39	20 1	1 47	6 49	1 22	23 37	2 18	19 18	0 47	20 14	0 12	23 13	0 20	21 45	0 47	3 8	15 14	20 34	20 46	26 9	14 8	7 32					
T 12	13 56	22 15	0 34	19 40	1 51	6 19	1 21	23 41	2 17	19 20	0 47	20 13	0 12	23 13	0 20	21 45	0 47	3 7	15 14	20 34	20 47	26 9	14 9	7 32					
W13	13 36	18 44	0n33	19 16	1 54	5 48	1 20	23 44	2 17	19 22	0 47	20 11	0 12	23 13	0 20	21 44	0 47	3 7	15 15	20 34	20 47	26 8	14 10	7 31					
T 14	13 16	14 22	1 39	18 52	1 57	5 18	1 18	23 48	2 17	19 24	0 47	20 10	0 12	23 13	0 20	21 44	0 47	3 6	15 15	20 34	20 48	26 8	14 11	7 31					
F 15	12 55	9 19	2 42	18 26	2 0	4 47	1 17	23 51	2 16	19 26	0 47	20 9	0 12	23 12	0 20	21 44	0 47	3 6	15 16	20 35	20 48	26 8	14 12	7 30					
S 16	12 35	3 47	3 37	17 58	2 2	4 16	1 15	23 54	2 16	19 28	0 47	20 7	0 12	23 12	0 20	21 44	0 47	3 6	15 16	20 36	20 49	26 7	14 12	7 30					
S 17	12 14	2n 0	4 23	17 29	2 4	3 46	1 13	23 58	2 15	19 30	0 47	20 6	0 12	23 12	0 20	21 43	0 47	3 5	15 16	20 37	20 50	26 7	14 13	7 30					
M18	11 53	7 47	4 55	16 59	2 5	3 15	1 12	24 1	2 15	19 31	0 47	20 5	0 12	23 12	0 20	21 43	0 47	3 5	15 17	20 38	20 50	26 7	14 14	7 29					
T 19	11 32	13 17	5 11	16 28	2 6	2 43	1 10	24 5	2 15	19 33	0 47	20 3	0 12	23 11	0 20	21 43	0 47	3 4	15 17	20 39	20 51	26 6	14 15	7 29					
W20	11 11	18 13	5 9	15 55	2 7	2 12	1 8	24 8	2 14	19 35	0 47	20 2	0 12	23 11	0 20	21 43	0 47	3 4	15 18	20 39	20 52	26 6	14 16	7 28					
T 21	10 49	22 13	4 50	15 20	2 7	1 41	1 6	24 11	2 14	19 37	0 47	20 0	0 12	23 11	0 20	21 43	0 47	3 4	15 18	20 40	20 52	26 6	14 17	7 28					
F 22	10 27	24 59	4 13	14 45	2 7	1 10	1 4	24 15	2 13	19 38	0 47	19 59	0 12	23 11	0 20	21 42	0 47	3 3	15 19	20 40	20 53	26 5	14 18	7 27					
S 23	10 6	26 11	3 21	14 8	2 6	0 39	1 2	24 18	2 13	19 40	0 47	19 58	0 13	23 11	0 20	21 42	0 47	3 3	15 19	20 40	20 53	26 5	14 19	7 27					
S 24	9 44	25 41	2 16	13 29	2 5	0 7	1 0	24 21	2 12	19 41	0 47	19 56	0 13	23 10	0 20	21 42	0 47	3 2	15 20	20 39	20 54	26 5	14 20	7 26					
M25	9 21	23 29	1 2	12 49	2 3	0n24	0 58	24 24	2 12	19 43	0 47	19 55	0 13	23 10	0 20	21 42	0 47	3 2	15 20	20 39	20 55	26 4	14 20	7 26					
T 26	8 59	19 48	0s16	12 8	2 1	0 55	0 56	24 27	2 12	19 44	0 47	19 54	0 13	23 10	0 20	21 42	0 47	3 1	15 21	20 39	20 55	26 4	14 21	7 25					
W27	8 37	14 56	1 32	11 26	1 59	1 27	0 53	24 30	2 11	19 46	0 47	19 52	0 13	23 10	0 20	21 41	0 47	3 1	15 21	20 39	20 56	26 3	14 22	7 25					
T 28	8s14	9n19	2s42	10s42	1s56	1n58	0s51	24n33	2n11	19n47	0n47	19s51	0s13	23s 9	0s20	21s41	0n47	3s 0	15n22	20s40	20s56	26s 3	14n23	7s24					

Julian Day Number = 2448288.5, Delta T = 57.63 sec

Ecliptic obliquity = 23°26'30, Nutation = 0°00'17, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 24°36'57, Lahiri = 23°43'57

# ASTRODIENST EPHEMERIS for the year 1991

## geocentric

MARCH 1991

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	10 33 13	9♂53'44	12♂54	8♂56	8♂9 9	13♂41	4°R55	2♂26	12♂50	16♂7	20°R22	27°R23	26♂1	23♂48	21°R36	F 1
S 2	10 37 9	10°53'57	26°36	10°48	9°23	14° 8	4♂50	2°32	12°53	16° 9	20♂22	27♂16	25°57	23°54	21♂34	S 2
S 3	10 41 6	11°54'07	9♂59	12°41	10°36	14°35	4°45	2°38	12°55	16°10	20°21	27° 9	25°54	24° 1	21°32	S 3
M 4	10 45 2	12°54'16	23° 1	14°36	11°50	15° 3	4°40	2°45	12°57	16°12	20°21	27° 1	25°51	24° 8	21°30	M 4
T 5	10 48 59	13°54'23	5♂42	16°30	13° 3	15°31	4°35	2°51	12°59	16°13	20°21	26°54	25°48	24°14	21°28	T 5
W 6	10 52 55	14°54'29	18° 5	18°26	14°17	15°58	4°30	2°56	13° 2	16°14	20°20	26°48	25°45	24°21	21°26	W 6
T 7	10 56 52	15°54'33	0♂13	20°22	15°30	16°26	4°26	3° 2	13° 4	16°16	20°20	26°45	25°42	24°28	21°25	T 7
F 8	11 0 48	16°54'36	12° 9	22°19	16°44	16°54	4°21	3° 8	13° 6	16°17	20°19	26°D43	25°38	24°34	21°23	F 8
S 9	11 4 45	17°54'37	23°59	24°16	17°57	17°23	4°17	3°14	13° 8	16°18	20°19	26°43	25°35	24°41	21°21	S 9
S 10	11 8 42	18°54'36	5♂48	26°13	19°10	17°51	4°13	3°20	13°10	16°20	20°18	26°44	25°32	24°48	21°20	S 10
M 11	11 12 38	19°54'34	17°42	28°10	20°23	18°20	4° 9	3°25	13°12	16°21	20°18	26°45	25°29	24°54	21°18	M 11
T 12	11 16 35	20°54'30	29°44	0♂6	21°37	18°49	4° 6	3°31	13°13	16°22	20°17	26°R45	25°26	25° 1	21°17	T 12
W 13	11 20 31	21°54'24	12♂1	2° 3	22°50	19°18	4° 2	3°36	13°15	16°24	20°16	26°44	25°22	25° 8	21°16	W 13
T 14	11 24 28	22°54'16	24°35	3°58	24° 3	19°47	3°59	3°42	13°17	16°25	20°16	26°41	25°19	25°14	21°15	T 14
F 15	11 28 24	23°54'07	7♂27	5°52	25°16	20°16	3°56	3°47	13°19	16°26	20°15	26°35	25°16	25°21	21°14	F 15
S 16	11 32 21	24°53'55	20°40	7°44	26°28	20°46	3°53	3°53	13°21	16°27	20°14	26°26	25°13	25°28	21°13	S 16
S 17	11 36 17	25°53'42	4♂11	9°35	27°41	21°15	3°51	3°58	13°22	16°28	20°14	26°16	25°10	25°34	21°12	S 17
M 18	11 40 14	26°53'27	17°58	11°23	28°54	21°45	3°48	4° 3	13°24	16°29	20°13	26° 6	25° 7	25°41	21°11	M 18
T 19	11 44 10	27°53'09	1♂57	13° 8	0♂7	22°15	3°46	4° 8	13°25	16°30	20°12	25°56	25° 3	25°48	21°11	T 19
W 20	11 48 7	28°52'50	16° 4	14°49	1°19	22°45	3°44	4°14	13°27	16°31	20°11	25°48	25° 0	25°54	21°10	W 20
T 21	11 52 4	29°52'28	0♂14	16°27	2°32	23°15	3°42	4°19	13°28	16°32	20°10	25°42	24°57	26° 1	21°10	T 21
F 22	11 56 0	0♂52'04	14°25	18° 0	3°45	23°46	3°40	4°24	13°30	16°33	20° 9	25°39	24°54	26° 8	21°10	F 22
S 23	11 59 57	1°51'38	28°33	19°28	4°57	24°16	3°38	4°28	13°31	16°34	20° 8	25°D38	24°51	26°14	21° 9	S 23
S 24	12 3 53	2°51'09	12♂39	20°52	6° 9	24°47	3°37	4°33	13°32	16°35	20° 7	25°38	24°48	26°21	21° 9	S 24
M 25	12 7 50	3°50'38	26°40	22° 9	7°22	25°18	3°36	4°38	13°34	16°36	20° 6	25°R38	24°44	26°28	21°D 9	M 25
T 26	12 11 46	4°50'05	10♂37	23°21	8°34	25°48	3°35	4°43	13°35	16°36	20° 5	25°37	24°41	26°34	21° 9	T 26
W 27	12 15 43	5°49'29	24°27	24°27	9°46	26°19	3°34	4°47	13°36	16°37	20° 4	25°34	24°38	26°41	21° 9	W 27
T 28	12 19 39	6°48'52	8♂10	25°25	10°58	26°50	3°34	4°52	13°37	16°38	20° 3	25°28	24°35	26°48	21°10	T 28
F 29	12 23 36	7°48'11	21°43	26°17	12°10	27°22	3°33	4°56	13°38	16°39	20° 2	25°20	24°32	26°54	21°10	F 29
S 30	12 27 33	8°47'29	5♂5	27° 3	13°22	27°53	3°33	5° 1	13°39	16°39	20° 1	25° 9	24°28	27° 1	21°10	S 30
S 31	12 31 29	9♂46'45	18♂12	27♂40	14♂34	28♂24	3°D33	5♂5	13♂40	16♂40	20♂0	24♂56	24♂25	27♂8	21♂11	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	7s52	3n19	3s41	9s57	1s52	2n29	0s49	24n36	2n10	19n48	0n47	19s50	0s13	23s 9	0s20	21s41	0n47	3s 0	15n22	20s41	20s57	26s 2	14n24	7s24	
S 2	7 29	2s43	4 26	9 11	1 48	3 1	0 46	24 39	2 10	19 50	0 47	19 48	0 13	23 9	0 20	21 41	0 47	2 59	15 22	20 42	20 57	26 2	14 25	7 23	
S 3	7 6	8 28	4 55	8 23	1 43	3 32	0 44	24 42	2 9	19 51	0 48	19 47	0 13	23 9	0 20	21 41	0 48	2 59	15 23	20 44	20 58	26 2	14 26	7 23	
M 4	6 43	13 42	5 8	7 34	1 38	4 3	0 41	24 44	2 9	19 52	0 48	19 46	0 13	23 9	0 20	21 40	0 48	2 58	15 23	20 45	20 59	26 1	14 27	7 22	
T 5	6 20	18 12	5 5	6 44	1 32	4 34	0 39	24 47	2 9	19 53	0 48	19 45	0 13	23 9	0 20	21 40	0 48	2 58	15 24	20 47	20 59	26 1	14 27	7 22	
W 6	5 57	21 49	4 48	5 53	1 26	5 5	0 36	24 50	2 8	19 54	0 48	19 43	0 13	23 8	0 20	21 40	0 48	2 57	15 24	20 48	21 0	26 0	14 28	7 21	
T 7	5 33	24 24	4 18	5 1	1 19	5 36	0 33	24 52	2 8	19 55	0 48	19 42	0 14	23 8	0 20	21 40	0 48	2 57	15 25	20 49	21 0	26 0	14 29	7 20	
F 8	5 10	25 50	3 37	4 8	1 11	6 6	0 31	24 54	2 7	19 57	0 48	19 41	0 14	23 8	0 20	21 40	0 48	2 56	15 25	20 49	21 1	25 59	14 30	7 20	
S 9	4 47	26 5	2 47	3 15	1 3	6 37	0 28	24 57	2 7	19 58	0 48	19 40	0 14	23 8	0 20	21 40	0 48	2 56	15 26	20 49	21 2	25 59	14 31	7 19	
S 10	4 23	25 9	1 50	2 20	0 54	7 7	0 25	24 59	2 6	19 58	0 48	19 38	0 14	23 8	0 20	21 39	0 48	2 55	15 26	20 49	21 2	25 58	14 31	7 19	
M11	4 0	23 5	0 49	1 25	0 45	7 38	0 22	25 1	2 6	19 59	0 48	19 37	0 14	23 7	0 20	21 39	0 48	2 55	15 26	20 48	21 3	25 58	14 32	7 18	
T 12	3 36	19 57	0n16	0 30	0 35	8 8	0 19	25 3	2 5	20 0	0 48	19 36	0 14	23 7	0 20	21 39	0 48	2 54	15 27	20 48	21 3	25 57	14 33	7 17	
W13	3 13	15 54	1 21	0n26	0 25	8 38	0 16	25 5	2 5	20 1	0 47	19 35	0 14	23 7	0 20	21 39	0 48	2 53	15 27	20 49	21 4	25 57	14 34	7 17	
T 14	2 49	11 4	2 24	1 22	0 14	9 7	0 13	25 7	2 4	20 2	0 47	19 33	0 14	23 7	0 20	21 39	0 48	2 53	15 28	20 49	21 5	25 56	14 35	7 16	
F 15	2 25	5 40	3 20	2 17	0 3	9 37	0 10	25 9	2 4	20 2	0 47	19 32	0 14	23 7	0 20	21 39	0 48	2 52	15 28	20 50	21 5	25 56	14 35	7 16	
S 16	2 2	0n 6	4 7	3 12	0n 9	10 6	0 7	25 10	2 3	20 3	0 47	19 31	0 14	23 7	0 20	21 38	0 48	2 52	15 28	20 52	21 6	25 55	14 36	7 15	
S 17	1 38	5 58	4 42	4 7	0 21	10 35	0 4	25 12	2 3	20 4	0 47	19 30	0 14	23 7	0 20	21 38	0 48	2 51	15 29	20 54	21 6	25 55	14 37	7 14	
M18	1 14	11 41	5 1	5 1	0 33	11 4	0 1	25 13	2 3	20 4	0 47	19 29	0 15	23 6	0 20	21 38	0 48	2 51	15 29	20 56	21 7	25 54	14 38	7 14	
T 19	0 50	16 52	5 2	5 53	0 46	11 33	0n 2	25 15	2 2	20 5	0 47	19 28	0 15	23 6	0 20	21 38	0 48	2 50	15 30	20 58	21 7	25 54	14 38	7 13	
W20	0 27	21 12	4 45	6 44	0 58	12 1	0 5	25 16	2 2	20 5	0 47	19 27	0 15	23 6	0 21	21 38	0 48	2 50	15 30	20 59	21 8	25 53	14 39	7 12	
T 21	0 3	24 17	4 11	7 33	1 11	12 29	0 8	25 17	2 1	20 6	0 47	19 25	0 15	23 6	0 21	21 38	0 48	2 49	15 30	21 0	21 9	25 52	14 40	7 12	
F 22	0n21	25 51	3 21	8 21	1 24	12 57	0 11	25 18	2 1	20 6	0 47	19 24	0 15	23 6	0 21	21 38	0 48	2 48	15 31	21 1	21 9	25 52	14 40	7 11	
S 23	0 44	25 45	2 19	9 6	1 36	13 24	0 15	25 19	2 0	20 6	0 47	19 23	0 15	23 6	0 21	21 37	0 48	2 48	15 31	21 1	21 10	25 51	14 41	7 10	
S 24	1 8	23 59	1 9	9 49	1 48	13 51	0 18	25 20	2 0	20 7	0 47	19 22	0 15	23 6	0 21	21 37	0 48	2 47	15 31	21 1	21 10	25 51	14 42	7 10	
M25	1 32	20 44	0s 6	10 29	2 0	14 18	0 21	25 21	1 59	20 7	0 47	19 21	0 15	23 6	0 21	21 37	0 48	2 47	15 32	21 1	21 11	25 50	14 42	7 9	
T 26	1 55	16 19	1 19	11 6	2 11	14 44	0 24	25 21	1 59	20 7	0 47	19 20	0 15	23 5	0 21	21 37	0 48	2 46	15 32	21 1	21 11	25 50	14 43	7 9	
W27	2 19	11 4	2 27	11 40	2 22	15 11	0 27	25 22	1 58	20 7	0 47	19 19	0 15	23 5	0 21	21 37	0 48	2 46	15 32	21 2	21 12	25 49	14 44	7 8	
T 28	2 42	5 20	3 25	12 11	2 32	15 36	0 31	25 22	1 58	20 7	0 47	19 18	0 16	23 5	0 21	21 37	0 48	2 45	15 33	21 3	21 13	25 48	14 44	7 7	
F 29	3 6	0s34	4 12	12 39	2 41	16 2	0 34	25 22	1 57	20 7	0 47	19 17	0 16	23 5	0 21	21 37	0 48	2 44	15 33	21 4	21 13	25 48	14 45	7 7	
S 30	3 29	6 21	4 43	13 3	2 49	16 27	0 37	25 22	1 57	20 7	0 47	19 16	0 16	23 5	0 21	21 37	0 48	2 44	15 33	21 6	21 14	25 47	14 46	7 6	
S 31	3n52	11s44	4s59	13n24	2n57	16n51	0n41	25n22	1n56	20n 7	0n47	19s15	0s16	23s 5	0s21	21s37	0n48	2s43	15n34	21s 9	21s14	25s46	14n46	7s 5	

# ASTRODIENST EPHEMERIS for the year 1991

## geocentric

APRIL 1991

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	12 35 26	10°45'58	1♂ 3	28°11	15°45	28°56	3♂33	5♂ 9	13°41	16°41	19°R59	24°R44	24°22	27°14	21°12	M 1
T 2	12 39 22	11°45'10	13°38	28°34	16°57	29°27	3°34	5°14	13°42	16°41	19°M57	24°32	24°19	27°21	21°12	T 2
W 3	12 43 19	12°44'20	25°57	28°51	18° 9	29°59	3°34	5°18	13°43	16°42	19°56	24°22	24°16	27°28	21°13	W 3
T 4	12 47 15	13°43'28	8♂ 3	28°59	19°20	0°31	3°35	5°22	13°44	16°42	19°55	24°15	24°13	27°34	21°14	T 4
F 5	12 51 12	14°42'34	19°59	29°R 1	20°32	1° 3	3°36	5°26	13°44	16°43	19°54	24°10	24° 9	27°41	21°15	F 5
S 6	12 55 8	15°41'39	1°348	28°56	21°43	1°35	3°37	5°29	13°45	16°43	19°52	24° 8	24° 6	27°48	21°16	S 6
S 7	12 59 5	16°40'42	13°37	28°44	22°54	2° 7	3°38	5°33	13°46	16°44	19°51	24°D 7	24° 3	27°54	21°17	S 7
M 8	13 3 2	17°39'43	25°30	28°27	24° 5	2°39	3°40	5°37	13°46	16°44	19°50	24°R 7	24° 0	28° 1	21°19	M 8
T 9	13 6 58	18°38'42	7♂34	28° 3	25°16	3°11	3°41	5°41	13°47	16°44	19°48	24° 7	23°57	28° 8	21°20	T 9
W10	13 10 55	19°37'39	19°52	27°34	26°27	3°43	3°43	5°44	13°47	16°45	19°47	24° 5	23°54	28°14	21°22	W10
T 11	13 14 51	20°36'35	2°30	27° 1	27°38	4°16	3°45	5°48	13°48	16°45	19°46	24° 0	23°50	28°21	21°23	T 11
F 12	13 18 48	21°35'28	15°32	26°24	28°49	4°48	3°48	5°51	13°48	16°45	19°44	23°53	23°47	28°28	21°25	F 12
S 13	13 22 44	22°34'20	28°58	25°44	29°59	5°21	3°50	5°54	13°48	16°45	19°43	23°44	23°44	28°34	21°27	S 13
S 14	13 26 41	23°33'10	12°47	25° 2	1°110	5°53	3°53	5°57	13°48	16°46	19°41	23°32	23°41	28°41	21°29	S 14
M15	13 30 37	24°31'58	26°57	24°18	2°21	6°26	3°55	6° 0	13°49	16°46	19°40	23°20	23°38	28°48	21°31	M15
T 16	13 34 34	25°30'44	11°23	23°33	3°31	6°59	3°58	6° 3	13°49	16°46	19°38	23° 8	23°34	28°54	21°33	T 16
W17	13 38 31	26°29'29	25°56	22°49	4°41	7°32	4° 1	6° 6	13°49	16°46	19°37	22°59	23°31	29° 1	21°35	W17
T 18	13 42 27	27°28'11	10°11	22° 6	5°51	8° 5	4° 5	6° 9	13°R49	16°46	19°35	22°51	23°28	29° 8	21°37	T 18
F 19	13 46 24	28°26'51	25° 1	21°25	7° 1	8°38	4° 8	6°12	13°49	16°R46	19°34	22°47	23°25	29°14	21°39	F 19
S 20	13 50 20	29°25'29	9°23	20°46	8°11	9°11	4°12	6°15	13°49	16°46	19°32	22°45	23°22	29°21	21°42	S 20
S 21	13 54 17	0°24'04	23°32	20°11	9°21	9°44	4°16	6°17	13°49	16°46	19°31	22°45	23°19	29°28	21°44	S 21
M22	13 58 13	1°22'37	7°29	19°39	10°31	10°18	4°20	6°20	13°49	16°46	19°29	22°45	23°15	29°34	21°47	M22
T 23	14 2 10	2°21'08	21°14	19°11	11°41	10°51	4°24	6°22	13°48	16°46	19°28	22°44	23°12	29°41	21°49	T 23
W24	14 6 6	3°19'37	4°47	18°47	12°50	11°24	4°28	6°24	13°48	16°45	19°26	22°40	23° 9	29°47	21°52	W24
T 25	14 10 3	4°18'04	18° 8	18°28	13°59	11°58	4°33	6°27	13°48	16°45	19°25	22°35	23° 6	29°54	21°55	T 25
F 26	14 14 0	5°16'28	1°18	18°13	15° 9	12°31	4°37	6°29	13°47	16°45	19°23	22°26	23° 3	0° 1	21°58	F 26
S 27	14 17 56	6°14'51	14°17	18° 4	16°18	13° 5	4°42	6°31	13°47	16°45	19°21	22°15	22°59	0° 7	22° 1	S 27
S 28	14 21 53	7°13'11	27° 4	17°D59	17°27	13°39	4°47	6°33	13°47	16°45	19°20	22° 3	22°56	0°14	22° 4	S 28
M29	14 25 49	8°11'30	9°39	18° 0	18°36	14°12	4°52	6°34	13°46	16°44	19°18	21°50	22°53	0°21	22° 7	M29
T 30	14 29 46	9°8'47	22°1	18°Y 5	19°114	14°546	4°58	6°36	13°46	16°44	19°16	21°38	22°50	0°27	22°11	T 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	4n16	16s31	4s59	13n41	3n 3	17n15	0n44	25n22	1n56	20n 7	0n47	19s14	0s16	23s 5	0s21	21s36	0n48	2s43	15n34	21s11	21s15	25s46	14n47	7s 5					
T 2	4 39	20 27	4 45	13 54	3 8	17 39	0 47	25 22	1 56	20 7	0 47	19 13	0 16	23 5	0 21	21 36	0 48	2 42	15 34	21 13	21 15	25 45	14 47	7 4					
W 3	5 2	23 25	4 17	14 3	3 12	18 2	0 50	25 22	1 55	20 7	0 47	19 12	0 16	23 5	0 21	21 36	0 48	2 41	15 34	21 15	21 16	25 45	14 48	7 3					
T 4	5 25	25 15	3 38	14 9	3 14	18 25	0 54	25 21	1 55	20 7	0 47	19 12	0 16	23 5	0 21	21 36	0 48	2 41	15 35	21 16	21 17	25 44	14 48	7 2					
F 5	5 48	25 54	2 50	14 10	3 15	18 48	0 57	25 20	1 54	20 7	0 47	19 11	0 16	23 5	0 21	21 36	0 48	2 40	15 35	21 17	21 17	25 43	14 49	7 1					
S 6	6 11	25 21	1 55	14 8	3 15	19 10	1 0	25 20	1 54	20 6	0 47	19 10	0 16	23 5	0 21	21 36	0 48	2 40	15 35	21 17	21 18	25 43	14 49	7 1					
S 7	6 33	23 40	0 55	14 2	3 13	19 31	1 3	25 19	1 53	20 6	0 47	19 9	0 17	23 5	0 21	21 36	0 48	2 39	15 36	21 17	21 18	25 42	14 50	7 1					
M 8	6 56	20 55	0n 7	13 52	3 9	19 52	1 7	25 18	1 53	20 6	0 47	19 8	0 17	23 5	0 21	21 36	0 48	2 39	15 36	21 17	21 19	25 41	14 50	7 0					
T 9	7 18	17 15	1 11	13 39	3 4	20 13	1 10	25 16	1 52	20 5	0 47	19 7	0 17	23 5	0 21	21 36	0 48	2 38	15 36	21 17	21 19	25 40	14 51	6 59					
W10	7 41	12 46	2 12	13 22	2 57	20 33	1 13	25 15	1 52	20 5	0 47	19 7	0 17	23 5	0 21	21 36	0 48	2 37	15 36	21 18	21 20	25 40	14 51	6 59					
T 11	8 3	7 39	3 8	13 2	2 49	20 52	1 16	25 14	1 51	20 4	0 47	19 6	0 17	23 5	0 21	21 36	0 48	2 37	15 36	21 19	21 20	25 39	14 51	6 58					
F 12	8 25	2 4	3 56	12 40	2 39	21 11	1 19	25 12	1 51	20 3	0 46	19 5	0 17	23 5	0 21	21 36	0 48	2 36	15 37	21 20	21 21	25 38	14 52	6 57					
S 13	8 47	3n46	4 33	12 15	2 28	21 30	1 22	25 10	1 50	20 3	0 46	19 4	0 17	23 5	0 21	21 36	0 48	2 36	15 37	21 21	21 21	25 38	14 52	6 57					
S 14	9 9	9 35	4 55	11 48	2 16	21 47	1 25	25 8	1 50	20 2	0 46	19 4	0 17	23 5	0 21	21 36	0 48	2 35	15 37	21 23	21 22	25 37	14 53	6 56					
M15	9 30	15 3	5 0	11 19	2 2	22 5	1 29	25 6	1 49	20 2	0 46	19 3	0 17	23 5	0 21	21 36	0 48	2 35	15 37	21 25	21 22	25 36	14 53	6 55					
T 16	9 52	19 46	4 46	10 49	1 48	22 21	1 32	25 4	1 49	20 1	0 46	19 2	0 17	23 5	0 21	21 36	0 48	2 34	15 37	21 27	21 23	25 35	14 53	6 55					
W17	10 13	23 20	4 13	10 18	1 32	22 38	1 35	25 2	1 48	20 0	0 46	19 2	0 18	23 5	0 21	21 36	0 48	2 34	15 38	21 29	21 24	25 35	14 54	6 54					
T 18	10 34	25 23	3 23	9 47	1 16	22 53	1 37	25 0	1 48	19 59	0 46	19 1	0 18	23 5	0 21	21 36	0 48	2 33	15 38	21 30	21 24	25 34	14 54	6 53					
F 19	10 55	25 42	2 21	9 16	1 0	23 8	1 40	24 57	1 48	19 58	0 46	19 1	0 18	23 5	0 21	21 35	0 48	2 33	15 38	21 31	21 25	25 33	14 54	6 53					
S 20	11 16	24 17	1 10	8 46	0 43	23 22	1 43	24 54	1 47	19 57	0 46	19 0	0 18	23 5	0 21	21 35	0 48	2 32	15 38	21 31	21 25	25 32	14 54	6 52					
S 21	11 37	21 19	0s 4	8 17	0 26	23 36	1 46	24 51	1 47	19 56	0 46	19 0	0 18	23 5	0 21	21 35	0 48	2 32	15 38	21 31	21 26	25 32	14 55	6 51					
M22	11 57	17 9	1 17	7 50	0 9	23 49	1 49	24 48	1 46	19 55	0 46	18 59	0 18	23 5	0 21	21 35	0 48	2 31	15 38	21 31	21 26	25 31	14 55	6 51					
T 23	12 17	12 8	2 25	7 24	0s 8	24 2	1 52	24 45	1 46	19 54	0 46	18 59	0 18	23 5	0 21	21 35	0 48	2 31	15 38	21 32	21 27	25 30	14 55	6 50					
W24	12 37	6 37	3 23	6 59	0 24	24 14	1 54	24 42	1 45	19 53	0 46	18 58	0 18	23 5	0 21	21 35	0 48	2 30	15 39	21 32	21 27	25 29	14 55	6 50					
T 25	12 57	0 52	4 9	6 38	0 40	24 25	1 57	24 38	1 45	19 52	0 46	18 58	0 18	23 5	0 21	21 35	0 48	2 30	15 39	21 33	21 28	25 28	14 56	6 49					
F 26	13 17	4s49	4 41	6 18	0 55	24 36	1 59	24 35	1 44	19 51	0 46	18 57	0 19	23 5	0 21	21 35	0 48	2 29	15 39	21 34	21 28	25 28	14 56	6 48					
S 27	13 36	10 13	4 58	6 1	1 9	24 45	2 2	24 31	1 44	19 50	0 46	18 57	0 19	23 5	0 22	21 35	0 48	2 29	15 39	21 36	21 29	25 27	14 56	6 48					
S 28	13 55	15 5	5 0	5 46	1 23	24 55	2 4	24 27	1 43	19 49	0 46	18 57	0 19	23 5	0 22	21 36	0 48	2 28	15 39	21 38	21 29	25 26	14 56	6 47					
M29	14 14	19 14	4 47	5 35	1 36	25 3	2 7	24 23	1 43	19 47	0 46	18 56	0 19	23 5	0 22	21 36	0 48	2 28	15 39	21 40	21 30	25 25	14 56	6 46					
T 30	14n33	22s28	4s20	5n25	1s49	25n11	2n 9	24n19	1n42	19n46	0n46	18s56	0s19	23s 5	0s22	21s36	0n48	2s27	15n39	21s42	21s31	25s24	14n56	6s46					

# ASTRODIENST EPHEMERIS for the year 1991

## geocentric

MAY 1991

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	14 33 42	10°8'02	4°11'11	18°15'15	20°11'53	15°02'20	5°03'38	13°04'45	16°04'44	19°01'15	21°02'28	22°03'47	0°03'34	22°02'14	W 1	
T 2	14 37 39	11° 6'16	16°12'12	18°30'22	22° 1'54	15°54'22	5° 9'39	6°39'39	13°04'44	16°04'43	19°01'13	21°02'20	22°04'44	0°04'41	22°17'17	T 2
F 3	14 41 35	12° 4'28	28° 4'43	18°50'23	23° 9'28	16°28'23	5°15'20	6°41'43	13°04'43	16°04'42	19°01'10	21°02'13	22°04'40	0°04'47	22°21'17	F 3
S 4	14 45 32	13° 2'38	9°03'53	19°14'24	24°18'24	17° 2'24	5°20'20	6°42'43	13°04'43	16°04'42	19°10'10	21°03'37	22°05'54	0°05'54	22°25'17	S 4
S 5	14 49 29	14° 0'47	21°41'11	19°42'25	25°26'26	17°36'26	5°26'26	6°43'42	13°04'42	16°04'42	19° 8'12	21°D12	22°03'34	1° 1'11	22°28'17	S 5
M 6	14 53 25	14°58'55	3°03'33	20°14'26	26°33'33	18°10'33	5°33'33	6°44'41	13°04'41	16°04'41	19° 6'13	21°03'31	22°03'31	1° 7'22	22°32'07	M 6
T 7	14 57 22	15°57'01	15°35'20	20°51'27	27°41'27	18°44'27	5°39'27	6°45'40	13°04'40	16°04'41	19° 5'13	21°R13	22°02'28	1°14'14	22°36'07	T 7
W 8	15 01 18	16°55'06	27°05'21	21°31'28	28°49'28	19°18'28	5°45'28	6°46'39	13°03'39	16°04'40	19° 3'12	21°02'12	22°02'25	1°21'21	22°40'07	W 8
T 9	15 05 15	17°53'09	10°03'31	22°15'29	29°56'29	19°52'29	5°52'29	6°47'38	13°03'38	16°03'39	19° 1'10	21°02'10	22°02'21	1°27'27	22°44'07	T 9
F 10	15 09 11	18°51'11	23°03'23	23° 2'13	3°02'27	20°27'20	5°59'20	6°48'37	13°03'37	16°03'39	19° 0'05	21° 5'22	22°02'18	1°34'34	22°48'07	F 10
S 11	15 13 08	19°49'11	7°02'23	23°53'21	2°10'21	21° 1'21	6° 6'21	6°49'36	13°03'36	16°03'38	18°58'20	20°02'59	22°02'15	1°41'41	22°52'07	S 11
S 12	15 17 04	20°47'10	20°59'24	24°47'31	3°17'21	21°35'21	6°13'21	6°49'35	13°03'35	16°03'37	18°56'20	20°02'50	22°02'12	1°47'47	22°56'07	S 12
M13	15 21 01	21°45'08	5°02'22	25°44'42	4°24'22	22°10'22	6°20'22	6°50'34	13°03'34	16°03'37	18°55'20	20°02'41	22°02'09	1°54'54	23° 0'07	M13
T 14	15 24 58	22°43'05	20° 4'26	26°45'53	5°30'22	22°44'22	6°27'22	6°50'33	13°03'33	16°03'36	18°53'20	20°02'32	22°02'05	2° 1'23	23° 5'07	T 14
W15	15 28 54	23°40'59	4°04'58	27°48'63	6°36'23	23°19'23	6°35'23	6°50'32	13°03'32	16°03'35	18°51'20	20°02'24	22°02'02	2° 7'23	23° 9'07	W15
T 16	15 32 51	24°38'53	19°55'28	28°55'74	7°43'23	23°53'23	6°42'23	6°50'30	13°03'30	16°03'34	18°50'20	20°02'19	21°02'59	2°14'14	23°14'07	T 16
F 17	15 36 47	25°36'45	4°04'48	0°04'48	8°49'24	24°28'24	6°50'24	6°R51	13°02'29	16°03'33	18°48'20	20°02'16	21°02'56	2°21'21	23°18'07	F 17
S 18	15 40 44	26°34'35	19°28'19	1°15'09	9°54'25	25° 3'25	6°58'25	6°50'28	13°02'28	16°03'33	18°46'20	20°D15	21°02'53	2°27'27	23°23'07	S 18
S 19	15 44 40	27°32'23	3°02'52	2°30'11	11° 0'25	25°38'25	7° 6'25	6°50'26	13°02'26	16°03'32	18°45'20	20°02'15	21°02'50	2°34'34	23°27'07	S 19
M20	15 48 37	28°30'10	17°05'34	3°47'12	12° 5'26	26°12'26	7°14'26	6°50'25	13°02'25	16°03'31	18°43'20	20°02'16	21°02'46	2°41'41	23°32'07	M20
T 21	15 52 33	29°27'55	1°04'42	5° 6'13	13°10'26	26°47'26	7°22'26	6°50'23	13°02'23	16°03'30	18°41'20	20°R17	21°02'43	2°47'47	23°37'07	T 21
W22	15 56 30	0°02'53	15°09'06	6°28'14	14°15'27	27°22'27	7°30'27	6°49'22	13°02'22	16°02'29	18°40'20	20°02'16	21°02'40	2°54'40	23°42'07	W22
T 23	16 00 27	1°23'20	28°18'07	7°53'15	15°20'27	27°57'27	7°39'27	6°49'20	13°02'20	16°02'28	18°38'20	20°02'13	21°02'37	3° 0'33	23°47'07	T 23
F 24	16 04 23	2°21'00	11°12'13	9°20'16	16°24'28	28°32'28	7°47'28	6°48'19	13°01'19	16°02'27	18°36'20	20° 7'23	21°02'34	3° 7'34	23°52'07	F 24
S 25	16 08 20	3°18'39	23°54'10	10°49'17	17°28'29	29° 7'29	7°56'29	6°48'17	13°01'17	16°02'26	18°35'20	20° 1'23	21°02'31	3°14'14	23°57'07	S 25
S 26	16 12 16	4°16'16	6°02'23	12°21'18	18°32'29	29°42'29	8° 5'29	6°47'15	13°01'15	16°02'25	18°33'19	19°02'53	21°02'27	3°20'20	24° 2'07	S 26
M27	16 16 13	5°13'52	18°41'13	13°55'19	19°36'00	0°02'17	8°14'30	6°46'14	13°01'14	16°02'24	18°32'19	19°02'45	21°02'24	3°27'27	24° 7'07	M27
T 28	16 20 09	6°11'27	0°04'50	15°32'20	20°39'00	0°52'30	8°23'30	6°45'12	13°01'12	16°02'22	18°30'19	19°02'37	21°02'21	3°34'34	24°12'07	T 28
W29	16 24 06	7° 9'00	12°50'17	17°11'21	21°42'12	1°27'32	8°32'32	6°44'10	13°01'10	16°02'21	18°28'19	19°02'31	21°02'18	3°40'40	24°18'07	W29
T 30	16 28 02	8° 6'33	24°44'18	18°52'22	22°45'23	2° 3'33	8°41'33	6°43'08	13°00'08	16°02'20	18°27'19	19°02'26	21°02'15	3°47'47	24°23'07	T 30
F 31	16 31 59	9°04'04	6°03'33	20°03'36	23°04'23	2°02'38	8°02'50	6°41'33	13°00'06	16°02'19	18°25'19	19°02'23	21°02'11	3°54'54	24°29'07	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	14n51	24s38	3s42	5n18	2s0	25n19	2n11	24n15	1n42	19n45	0n46	18s56	0s19	23s5	0s22	21s36	0n48
T 2	15 10	25 37	2 55	5 14	2 11	25 25	2 14	24 10	1 41	19 43	0 46	18 55	0 19	23 5	0 22	21 36	0 48
F 3	15 28	25 26	2 0	5 13	2 21	25 31	2 16	24 6	1 41	19 42	0 45	18 55	0 19	23 6	0 22	21 36	0 48
S 4	15 45	24 4	1 0	5 13	2 29	25 37	2 18	24 1	1 41	19 40	0 45	18 55	0 19	23 6	0 22	21 36	0 48
S 5	16 3	21 39	0n3	5 16	2 38	25 41	2 20	23 56	1 40	19 39	0 45	18 55	0 20	23 6	0 22	21 36	0 49
M 6	16 20	18 18	1 5	5 22	2 45	25 45	2 22	23 51	1 40	19 37	0 45	18 54	0 20	23 6	0 22	21 36	0 49
T 7	16 37	14 9	2 6	5 29	2 51	25 49	2 23	23 46	1 39	19 36	0 45	18 54	0 20	23 6	0 22	21 36	0 49
W 8	16 53	9 21	3 3	5 39	2 57	25 51	2 25	23 41	1 39	19 34	0 45	18 54	0 20	23 6	0 22	21 36	0 49
T 9	17 10	4 3	3 52	5 51	3 2	25 53	2 27	23 35	1 38	19 32	0 45	18 54	0 20	23 6	0 22	21 36	0 49
F 10	17 26	1n35	4 31	6 5	3 6	25 55	2 28	23 30	1 38	19 30	0 45	18 54	0 20	23 6	0 22	21 36	0 49
S 11	17 42	7 19	4 56	6 21	3 9	25 55	2 30	23 24	1 37	19 29	0 45	18 54	0 20	23 7	0 22	21 36	0 49
S 12	17 57	12 54	5 5	6 38	3 11	25 55	2 31	23 18	1 37	19 27	0 45	18 54	0 20	23 7	0 22	21 36	0 49
M13	18 12	17 56	4 55	6 57	3 13	25 54	2 32	23 12	1 36	19 25	0 45	18 54	0 20	23 7	0 22	21 36	0 49
T 14	18 27	22 1	4 26	7 18	3 14	25 53	2 34	23 6	1 36	19 23	0 45	18 54	0 21	23 7	0 22	21 36	0 49
W15	18 42	24 42	3 38	7 40	3 14	25 51	2 35	23 0	1 35	19 21	0 45	18 54	0 21	23 7	0 22	21 36	0 49
T 16	18 56	25 38	2 35	8 4	3 14	25 48	2 36	22 53	1 35	19 19	0 45	18 54	0 21	23 7	0 22	21 37	0 49
F 17	19 10	24 43	1 22	8 29	3 13	25 45	2 36	22 47	1 34	19 17	0 45	18 54	0 21	23 7	0 22	21 37	0 49
S 18	19 23	22 6	0 4	8 55	3 11	25 41	2 37	22 40	1 34	19 15	0 45	18 54	0 21	23 8	0 22	21 37	0 49
S 19	19 37	18 7	1s13	9 23	3 9	25 36	2 38	22 33	1 33	19 13	0 45	18 54	0 21	23 8	0 22	21 37	0 49
M20	19 50	13 11	2 23	9 52	3 6	25 31	2 38	22 26	1 33	19 11	0 45	18 55	0 21	23 8	0 22	21 37	0 49
T 21	20 2	7 41	3 24	10 22	3 2	25 25	2 39	22 19	1 33	19 9	0 45	18 55	0 21	23 8	0 22	21 37	0 49
W22	20 15	1 58	4 12	10 53	2 58	25 19	2 39	22 12	1 32	19 7	0 45	18 55	0 21	23 8	0 22	21 37	0 49
T 23	20 26	3s42	4 46	11 24	2 53	25 12	2 39	22 4	1 32	19 5	0 45	18 55	0 22	23 8	0 22	21 37	0 49
F 24	20 38	9 6	5 4	11 57	2 48	25 4	2 39	21 57	1 31	19 3	0 45	18 55	0 22	23 9	0 22	21 37	0 49
S 25	20 49	14 2	5 7	12 30	2 42	24 56	2 39	21 49	1 31	19 0	0 45	18 56	0 22	23 9	0 22	21 37	0 49
S 26	21 0	18 17	4 55	13 4	2 36	24 47	2 39	21 41	1 30	18 58	0 45	18 56	0 22	23 9	0 22	21 38	0 49
M27	21 10	21 42	4 30	13 39	2 29	24 38	2 39	21 33	1 30	18 56	0 45	18 56	0 22	23 9	0 22	21 38	0 49
T 28	21 21	24 7	3 53	14 14	2 21	24 28	2 38	21 25	1 29	18 53	0 45	18 57	0 22	23 9	0 22	21 38	0 49
W29	21 30	25 24	3 5	14 50	2 14	24 17	2 38	21 17	1 29	18 51	0 45	18 57	0 22	23 10	0 22	21 38	0 49
T 30	21 40	25 30	2 10	15 26	2 5	24 6	2 37	21 8	1 28	18 48	0 44	18 58	0 22	23 10	0 22	21 38	0 49
F 31	21n49	24s26	1s9	16n2	1s56	23n55	2n36	21n0	1n28	18n46	0n44	18s58	0s23	23s10	0s22	21s38	0n49

Julian Day Number = 2448377.5, Delta T = 57.81 sec  
 Ecliptic obliquity = 23°26'29", Nutation = 0°00'14", out-of-bounds declination in red  
 Ayanamsha: Fagan/Bradley = 24°37'09", Lahiri = 23°44'09"



ASTRODIENST EPHEMERIS for the year 1991  
geocentric

JUNE 1991

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 35 56	10 <sup>II</sup> 1'35	18 <sup>☾</sup> 21	22 <sup>☾</sup> 21	24 <sup>☾</sup> 50	3 <sup>♂</sup> 13	9 <sup>♂</sup> 0	6°R40	13°R 5	16°R18	18°R24	19°D22	21 <sup>☾</sup> 8	4 <sup>☾</sup> 0	24 <sup>☾</sup> 34	S 1
S 2	16 39 52	10°59'04	0 <sup>☾</sup> 9	24°10	25°52	3°48	9° 9	6 <sup>☾</sup> 38	13 <sup>☾</sup> 3	16 <sup>☾</sup> 17	18 <sup>☾</sup> 22	19 <sup>☾</sup> 23	21° 5	4° 7	24°40	S 2
M 3	16 43 49	11°56'33	12° 3	26° 0	26°54	4°24	9°19	6°37	13° 1	16°15	18°21	19°24	21° 2	4°14	24°45	M 3
T 4	16 47 45	12°54'01	24° 6	27°53	27°55	4°59	9°29	6°35	12°59	16°14	18°19	19°26	20°59	4°20	24°51	T 4
W 5	16 51 42	13°51'28	6 <sup>☾</sup> 23	29°48	28°56	5°34	9°38	6°33	12°57	16°13	18°18	19°27	20°56	4°27	24°56	W 5
T 6	16 55 38	14°48'54	18°59	1 <sup>II</sup> 46	29°57	6°10	9°48	6°32	12°55	16°11	18°16	19°R27	20°52	4°34	25° 2	T 6
F 7	16 59 35	15°46'20	1 <sup>☾</sup> 58	3°45	0 <sup>♂</sup> 57	6°45	9°58	6°30	12°53	16°10	18°15	19°26	20°49	4°40	25° 8	F 7
S 8	17 3 31	16°43'45	15°24	5°47	1°57	7°21	10° 8	6°28	12°51	16° 9	18°13	19°23	20°46	4°47	25°14	S 8
S 9	17 7 28	17°41'09	29°17	7°50	2°57	7°57	10°19	6°26	12°48	16° 7	18°12	19°20	20°43	4°54	25°20	S 9
M10	17 11 25	18°38'34	13 <sup>☾</sup> 38	9°55	3°56	8°32	10°29	6°23	12°46	16° 6	18°11	19°15	20°40	5° 0	25°25	M10
T 11	17 15 21	19°35'57	28°23	12° 2	4°55	9° 8	10°39	6°21	12°44	16° 5	18° 9	19°11	20°37	5° 7	25°31	T 11
W12	17 19 18	20°33'20	13 <sup>II</sup> 24	14°11	5°53	9°44	10°50	6°19	12°42	16° 3	18° 8	19° 8	20°33	5°13	25°37	W12
T 13	17 23 14	21°30'42	28°34	16°20	6°51	10°19	11° 0	6°16	12°40	16° 2	18° 7	19° 5	20°30	5°20	25°44	T 13
F 14	17 27 11	22°28'04	13 <sup>☾</sup> 42	18°31	7°49	10°55	11°11	6°14	12°38	16° 0	18° 5	19°D 4	20°27	5°27	25°50	F 14
S 15	17 31 7	23°25'24	28°39	20°42	8°46	11°31	11°21	6°11	12°35	15°59	18° 4	19° 4	20°24	5°33	25°56	S 15
S 16	17 35 4	24°22'44	13 <sup>♂</sup> 20	22°54	9°43	12° 7	11°32	6° 9	12°33	15°57	18° 3	19° 5	20°21	5°40	26° 2	S 16
M17	17 39 1	25°20'03	27°38	25° 6	10°39	12°43	11°43	6° 6	12°31	15°56	18° 1	19° 7	20°17	5°47	26° 8	M17
T 18	17 42 57	26°17'21	11 <sup>☾</sup> 32	27°18	11°35	13°18	11°54	6° 3	12°29	15°54	18° 0	19° 8	20°14	5°53	26°14	T 18
W19	17 46 54	27°14'38	25° 2	29°29	12°30	13°54	12° 5	6° 0	12°26	15°53	17°59	19°R 8	20°11	6° 0	26°21	W19
T 20	17 50 50	28°11'54	8 <sup>♂</sup> 9	1 <sup>☾</sup> 40	13°25	14°30	12°16	5°57	12°24	15°51	17°58	19° 8	20° 8	6° 7	26°27	T 20
F 21	17 54 47	29° 9'10	20°57	3°50	14°19	15° 6	12°27	5°54	12°22	15°50	17°57	19° 7	20° 5	6°13	26°33	F 21
S 22	17 58 43	0 <sup>☾</sup> 6'25	3 <sup>♂</sup> 28	5°59	15°13	15°42	12°38	5°51	12°19	15°48	17°56	19° 5	20° 2	6°20	26°40	S 22
S 23	18 2 40	1° 3'39	15°45	8° 7	16° 6	16°18	12°50	5°48	12°17	15°47	17°54	19° 2	19°58	6°27	26°46	S 23
M24	18 6 36	2° 0'52	27°52	10°13	16°58	16°55	13° 1	5°45	12°15	15°45	17°53	19° 0	19°55	6°33	26°53	M24
T 25	18 10 33	2°58'06	9 <sup>☾</sup> 50	12°17	17°50	17°31	13°12	5°41	12°12	15°44	17°52	18°57	19°52	6°40	26°59	T 25
W26	18 14 30	3°55'18	21°43	14°20	18°41	18° 7	13°24	5°38	12°10	15°42	17°51	18°55	19°49	6°47	27° 6	W26
T 27	18 18 26	4°52'31	3 <sup>☾</sup> 32	16°21	19°32	18°43	13°35	5°34	12° 7	15°41	17°50	18°54	19°46	6°53	27°12	T 27
F 28	18 22 23	5°49'43	15°20	18°20	20°22	19°19	13°47	5°31	12° 5	15°39	17°49	18°D54	19°43	7° 0	27°19	F 28
S 29	18 26 19	6°46'55	27° 9	20°18	21°11	19°56	13°59	5°27	12° 3	15°37	17°48	18°54	19°39	7° 7	27°25	S 29
S 30	18 30 16	7 <sup>☾</sup> 44'07	9 <sup>☾</sup> 1	22 <sup>☾</sup> 13	21 <sup>♂</sup> 59	20 <sup>♂</sup> 32	14 <sup>♂</sup> 10	5 <sup>☾</sup> 24	12 <sup>☾</sup> 0	15 <sup>☾</sup> 36	17 <sup>☾</sup> 47	18 <sup>☾</sup> 54	19 <sup>☾</sup> 36	7 <sup>☾</sup> 13	27 <sup>☾</sup> 32	S 30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	lat	
S 1	21n57	22s17	0s 6	16n38	1s47	23n42	2n35	20n51	1n27	18n43	0n44	18s58	0s23	23s10	0s22	21s38	0n49	2s17	15n36	22s 3	21s47	24s54	14n49	6s30
S 2	22 6	19 10	0n58	17 14	1 38	23 30	2 34	20 43	1 27	18 41	0 44	18 59	0 23	23 10	0 22	21 38	0 49	2 17	15 35	22 2	21 47	24 53	14 49	6 29
M 3	22 13	15 15	2 1	17 50	1 28	23 17	2 33	20 34	1 26	18 38	0 44	18 59	0 23	23 11	0 22	21 39	0 49	2 17	15 35	22 2	21 48	24 52	14 48	6 29
T 4	22 21	10 41	2 58	18 26	1 18	23 3	2 32	20 25	1 26	18 36	0 44	19 0	0 23	23 11	0 22	21 39	0 49	2 17	15 35	22 2	21 48	24 51	14 47	6 28
W 5	22 28	5 37	3 49	19 1	1 7	22 49	2 30	20 16	1 26	18 33	0 44	19 1	0 23	23 11	0 22	21 39	0 49	2 17	15 35	22 2	21 49	24 50	14 47	6 28
T 6	22 35	0 13	4 30	19 35	0 57	22 35	2 28	20 6	1 25	18 30	0 44	19 1	0 23	23 11	0 22	21 39	0 49	2 17	15 34	22 2	21 49	24 49	14 46	6 28
F 7	22 41	5n21	4 58	20 9	0 46	22 20	2 26	19 57	1 25	18 28	0 44	19 2	0 23	23 11	0 22	21 39	0 49	2 17	15 34	22 2	21 50	24 48	14 46	6 27
S 8	22 47	10 51	5 12	20 42	0 35	22 4	2 24	19 47	1 24	18 25	0 44	19 2	0 23	23 12	0 22	21 39	0 49	2 16	15 34	22 2	21 50	24 46	14 45	6 27
S 9	22 52	16 1	5 8	21 13	0 24	21 48	2 22	19 38	1 24	18 22	0 44	19 3	0 24	23 12	0 22	21 40	0 49	2 16	15 33	22 3	21 51	24 45	14 44	6 26
M10	22 57	20 28	4 45	21 43	0 13	21 32	2 20	19 28	1 23	18 19	0 44	19 4	0 24	23 12	0 23	21 40	0 49	2 16	15 33	22 3	21 51	24 44	14 44	6 26
T 11	23 2	23 45	4 3	22 12	0 2	21 16	2 17	19 18	1 23	18 17	0 44	19 4	0 24	23 12	0 23	21 40	0 49	2 16	15 33	22 4	21 52	24 43	14 43	6 26
W12	23 6	25 27	3 3	22 39	0n 8	20 59	2 15	19 8	1 22	18 14	0 44	19 5	0 24	23 13	0 23	21 40	0 49	2 16	15 32	22 5	21 52	24 42	14 42	6 25
T 13	23 10	25 16	1 50	23 3	0 19	20 41	2 12	18 58	1 22	18 11	0 44	19 6	0 24	23 13	0 23	21 40	0 49	2 16	15 32	22 5	21 53	24 41	14 41	6 25
F 14	23 14	23 14	0 30	23 26	0 29	20 23	2 9	18 48	1 21	18 8	0 44	19 6	0 24	23 13	0 23	21 40	0 49	2 16	15 32	22 5	21 53	24 40	14 41	6 25
S 15	23 17	19 34	0s53	23 46	0 39	20 5	2 6	18 37	1 21	18 5	0 44	19 7	0 24	23 13	0 23	21 41	0 49	2 16	15 31	22 5	21 54	24 39	14 40	6 24
S 16	23 19	14 45	2 10	24 4	0 49	19 47	2 2	18 27	1 20	18 2	0 44	19 8	0 24	23 13	0 23	21 41	0 49	2 16	15 31	22 5	21 54	24 38	14 39	6 24
M17	23 22	9 13	3 17	24 19	0 58	19 28	1 59	18 16	1 20	17 59	0 44	19 9	0 25	23 14	0 23	21 41	0 49	2 16	15 30	22 5	21 54	24 36	14 38	6 24
T 18	23 23	3 23	4 10	24 31	1 6	19 9	1 55	18 6	1 19	17 56	0 44	19 10	0 25	23 14	0 23	21 41	0 49	2 16	15 30	22 5	21 55	24 35	14 37	6 24
W19	23 25	2s26	4 48	24 41	1 14	18 50	1 51	17 55	1 19	17 53	0 44	19 10	0 25	23 14	0 23	21 41	0 49	2 17	15 30	22 4	21 55	24 34	14 36	6 23
T 20	23 26	7 58	5 10	24 47	1 21	18 30	1 47	17 44	1 18	17 50	0 44	19 11	0 25	23 14	0 23	21 41	0 49	2 17	15 29	22 5	21 56	24 33	14 36	6 23
F 21	23 26	13 2	5 15	24 51	1 28	18 11	1 43	17 33	1 18	17 46	0 44	19 12	0 25	23 15	0 23	21 42	0 49	2 17	15 29	22 5	21 56	24 32	14 35	6 23
S 22	23 26	17 27	5 6	24 52	1 34	17 51	1 39	17 22	1 18	17 43	0 44	19 13	0 25	23 15	0 23	21 42	0 49	2 17	15 28	22 5	21 57	24 31	14 34	6 22
S 23	23 26	21 3	4 42	24 51	1 39	17 30	1 34	17 10	1 17	17 40	0 44	19 14	0 25	23 15	0 23	21 42	0 49	2 17	15 28	22 5	21 57	24 29	14 33	6 22
M24	23 26	23 41	4 6	24 46	1 44	17 10	1 29	16 59	1 17	17 37	0 44	19 15	0 25	23 15	0 23	21 42	0 49	2 17	15 28	22 6	21 58	24 28	14 32	6 22
T 25	23 24	25 13	3 20	24 39	1 47	16 49	1 24	16 48	1 16	17 34	0 44	19 16	0 25	23 15	0 23	21 42	0 49	2 17	15 27	22 6	21 58	24 27	14 31	6 22
W26	23 23	25 36	2 25	24 30	1 50	16 29	1 19	16 36	1 16	17 30	0 44	19 17	0 26	23 16	0 23	21 43	0 49	2 17	15 27	22 6	21 59	24 26	14 30	6 22
T 27	23 21	24 48	1 24	24 18	1 53	16 8	1 14	16 24	1 15	17 27	0 44	19 18	0 26	23 16	0 23	21 43	0 49	2 18	15 26	22 6	21 59	24 25	14 29	6 21
F 28	23 19	22 53	0 20	24 4	1 54	15 46	1 8	16 13	1 15	17 24	0 44	19 19	0 26	23 16	0 23	21 43	0 49	2 18	15 26	22 7	22 0	24 23	14 28	6 21
S 29	23 16	19 59	0n46	23 48	1 55	15 25	1 2	16 1	1 14	17 20	0 44	19 20	0 26	23 16	0 23	21 43	0 49	2 18	15 25	22 7	22 0	24 22	14 27	6 21
S 30	23n13	16s15	1n49	23n30	1n55	15n 4	0n56	15n49	1n14	17n17	0n44	19s21	0s26	23s17	0s23	21s43	0n49	2s18	15n25	22s 6	22s 1	24s21	14n26	6s21





# ASTRODIENST EPHEMERIS for the year 1991

## geocentric

AUGUST 1991

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	20 36 26	8♌16'20	7♊50	3♊55	7♊19	10♊12	20♌49	3°R 8	10°R46	14°R45	17♌34	18°R48	17♊55	10♊46	1♌12	T 1
F 2	20 40 22	9°13'44	20°51	4°25	7♊19	10°49	21° 2	3° 4	10♊44	14♊44	17°34	18♊46	17°51	10°53	1°19	F 2
S 3	20 44 19	10°11'08	4♊11	4°52	7°17	11°27	21°15	2°59	10°42	14°42	17°34	18°D45	17°48	10°59	1°26	S 3
S 4	20 48 15	11° 8'34	17°50	5°14	7°12	12° 4	21°28	2°55	10°40	14°41	17°34	18°45	17°45	11° 6	1°33	S 4
M 5	20 52 12	12° 6'01	1♊49	5°32	7° 5	12°42	21°41	2°51	10°38	14°40	17°35	18°46	17°42	11°12	1°40	M 5
T 6	20 56 8	13° 3'30	16° 8	5°44	6°55	13°19	21°54	2°46	10°36	14°38	17°35	18°47	17°39	11°19	1°47	T 6
W 7	21 0 5	14° 1'00	0♊45	5°52	6°43	13°57	22° 7	2°42	10°34	14°37	17°35	18°48	17°35	11°26	1°54	W 7
T 8	21 4 1	14°58'31	15°35	5°R55	6°29	14°35	22°20	2°38	10°32	14°35	17°36	18°R49	17°32	11°32	2° 0	T 8
F 9	21 7 58	15°56'03	0♊32	5°52	6°12	15°12	22°34	2°33	10°30	14°34	17°36	18°49	17°29	11°39	2° 7	F 9
S 10	21 11 55	16°53'36	15°28	5°44	5°54	15°50	22°47	2°29	10°29	14°33	17°36	18°47	17°26	11°46	2°14	S 10
S 11	21 15 51	17°51'10	0♊15	5°30	5°33	16°28	23° 0	2°25	10°27	14°32	17°37	18°44	17°23	11°52	2°21	S 11
M12	21 19 48	18°48'46	14°46	5°12	5° 9	17° 6	23°13	2°21	10°25	14°30	17°37	18°40	17°20	11°59	2°28	M12
T 13	21 23 44	19°46'22	28°55	4°47	4°44	17°43	23°26	2°16	10°23	14°29	17°38	18°35	17°16	12° 6	2°35	T 13
W14	21 27 41	20°43'59	12♊38	4°18	4°17	18°21	23°39	2°12	10°22	14°28	17°38	18°31	17°13	12°12	2°41	W14
T 15	21 31 37	21°41'37	25°55	3°44	3°48	18°59	23°52	2° 8	10°20	14°27	17°39	18°27	17°10	12°19	2°48	T 15
F 16	21 35 34	22°39'17	8♊46	3° 5	3°17	19°37	24° 5	2° 4	10°18	14°25	17°39	18°25	17° 7	12°26	2°55	F 16
S 17	21 39 30	23°36'57	21°15	2°22	2°44	20°15	24°19	2° 0	10°17	14°24	17°40	18°D24	17° 4	12°32	3° 2	S 17
S 18	21 43 27	24°34'38	3♊26	1°35	2°11	20°53	24°32	1°56	10°15	14°23	17°41	18°24	17° 1	12°39	3° 8	S 18
M19	21 47 24	25°32'21	15°25	0°46	1°36	21°31	24°45	1°52	10°14	14°22	17°41	18°26	16°57	12°46	3°15	M19
T 20	21 51 20	26°30'04	27°16	29♊55	1° 0	22° 9	24°58	1°49	10°13	14°21	17°42	18°27	16°54	12°52	3°22	T 20
W21	21 55 17	27°27'49	9♊ 3	29° 3	0°23	22°47	25°11	1°45	10°11	14°20	17°43	18°29	16°51	12°59	3°28	W21
T 22	21 59 13	28°25'35	20°52	28°10	29♊46	23°26	25°24	1°41	10°10	14°19	17°44	18°R29	16°48	13° 5	3°35	T 22
F 23	22 3 10	29°23'22	2♊46	27°19	29° 9	24° 4	25°37	1°37	10° 8	14°18	17°44	18°28	16°45	13°12	3°42	F 23
S 24	22 7 6	0♊21'10	14°48	26°30	28°32	24°42	25°50	1°34	10° 7	14°17	17°45	18°25	16°41	13°19	3°48	S 24
S 25	22 11 3	1°18'59	27° 0	25°44	27°54	25°20	26° 4	1°30	10° 6	14°16	17°46	18°20	16°38	13°25	3°55	S 25
M26	22 14 59	2°16'51	9♊24	25° 2	27°18	25°59	26°17	1°27	10° 5	14°15	17°47	18°13	16°35	13°32	4° 1	M26
T 27	22 18 56	3°14'43	22° 0	24°25	26°42	26°37	26°30	1°23	10° 4	14°14	17°48	18° 6	16°32	13°39	4° 8	T 27
W28	22 22 53	4°12'37	4♊50	23°55	26° 7	27°15	26°43	1°20	10° 2	14°13	17°49	17°58	16°29	13°45	4°14	W28
T 29	22 26 49	5°10'33	17°52	23°30	25°33	27°54	26°56	1°16	10° 1	14°12	17°50	17°50	16°26	13°52	4°21	T 29
F 30	22 30 46	6° 8'31	1♊ 7	23°14	25° 1	28°32	27° 9	1°13	10° 0	14°11	17°51	17°44	16°22	13°59	4°27	F 30
S 31	22 34 42	7♊ 6'30	14♊35	23♊ 5	24♊30	29♊11	27♊22	1° 10	9♊59	14♊10	17♊52	17♊40	16♊19	14♊ 5	4♊33	S 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	18n12	7n51	5n10	7n47	2s27	4n48	4s19	8n39	0n58	15n16	0n45	19s56	0s29	23s23	0s23	21s49	0n48	2s31	15n 8	22s 7	22s15	23s39	13n44	6s18										
F 2	17 57	13 0	5 15	7 25	2 39	4 36	4 32	8 24	0 58	15 12	0 45	19 57	0 29	23 23	0 23	21 50	0 48	2 31	15 8	22 8	22 15	23 37	13 42	6 19										
S 3	17 42	17 41	5 4	7 4	2 52	4 25	4 46	8 9	0 57	15 8	0 45	19 58	0 29	23 23	0 23	21 50	0 48	2 32	15 7	22 8	22 15	23 36	13 41	6 19										
S 4	17 26	21 33	4 36	6 44	3 4	4 14	4 59	7 55	0 57	15 3	0 45	19 59	0 29	23 24	0 23	21 50	0 48	2 33	15 6	22 8	22 16	23 34	13 39	6 19										
M 5	17 10	24 18	3 51	6 27	3 16	4 5	5 12	7 40	0 56	14 59	0 45	20 0	0 29	23 24	0 23	21 50	0 48	2 33	15 6	22 8	22 16	23 33	13 38	6 19										
T 6	16 54	25 33	2 50	6 11	3 28	3 56	5 25	7 25	0 56	14 55	0 45	20 1	0 29	23 24	0 23	21 50	0 48	2 34	15 5	22 7	22 17	23 32	13 36	6 19										
W 7	16 37	25 4	1 38	5 58	3 39	3 48	5 38	7 10	0 55	14 51	0 45	20 2	0 30	23 24	0 23	21 50	0 48	2 34	15 5	22 7	22 17	23 30	13 35	6 19										
T 8	16 21	22 50	0 18	5 46	3 50	3 41	5 51	6 55	0 55	14 47	0 45	20 3	0 30	23 24	0 23	21 51	0 48	2 35	15 4	22 7	22 17	23 29	13 33	6 19										
F 9	16 4	19 0	1s 4	5 38	4 1	3 35	6 4	6 40	0 54	14 43	0 45	20 4	0 30	23 24	0 23	21 51	0 48	2 36	15 4	22 7	22 18	23 27	13 31	6 19										
S 10	15 46	13 57	2 21	5 32	4 10	3 30	6 17	6 25	0 54	14 38	0 45	20 5	0 30	23 24	0 23	21 51	0 48	2 36	15 3	22 7	22 18	23 26	13 30	6 19										
S 11	15 29	8 8	3 28	5 28	4 19	3 27	6 29	6 10	0 53	14 34	0 45	20 6	0 30	23 25	0 23	21 51	0 48	2 37	15 2	22 8	22 19	23 24	13 28	6 20										
M12	15 11	2 0	4 20	5 28	4 27	3 24	6 41	5 54	0 53	14 30	0 45	20 7	0 30	23 25	0 23	21 51	0 48	2 38	15 2	22 8	22 19	23 23	13 27	6 20										
T 13	14 53	4s 5	4 55	5 30	4 34	3 22	6 52	5 39	0 52	14 26	0 46	20 8	0 30	23 25	0 23	21 51	0 48	2 38	15 1	22 9	22 20	23 21	13 25	6 20										
W14	14 35	9 46	5 11	5 36	4 39	3 21	7 4	5 24	0 52	14 21	0 46	20 9	0 30	23 25	0 23	21 52	0 48	2 39	15 1	22 10	22 20	23 20	13 23	6 20										
T 15	14 17	14 49	5 10	5 44	4 43	3 22	7 14	5 9	0 51	14 17	0 46	20 10	0 30	23 25	0 23	21 52	0 48	2 40	15 0	22 10	22 20	23 18	13 22	6 20										
F 16	13 58	19 3	4 53	5 56	4 46	3 23	7 24	4 53	0 51	14 13	0 46	20 11	0 30	23 25	0 23	21 52	0 48	2 40	15 0	22 10	22 21	23 17	13 20	6 20										
S 17	13 39	22 18	4 23	6 10	4 47	3 26	7 34	4 38	0 50	14 8	0 46	20 12	0 30	23 25	0 23	21 52	0 48	2 41	14 59	22 11	22 21	23 15	13 18	6 20										
S 18	13 20	24 28	3 41	6 27	4 46	3 30	7 42	4 22	0 50	14 4	0 46	20 13	0 30	23 25	0 23	21 52	0 48	2 42	14 59	22 11	22 22	23 14	13 17	6 21										
M19	13 1	25 28	2 51	6 47	4 43	3 34	7 50	4 7	0 49	14 0	0 46	20 14	0 30	23 26	0 23	21 52	0 48	2 43	14 58	22 10	22 22	23 12	13 15	6 21										
T 20	12 41	25 18	1 53	7 9	4 39	3 40	7 58	3 52	0 49	13 55	0 46	20 15	0 30	23 26	0 23	21 52	0 48	2 43	14 57	22 10	22 22	23 11	13 13	6 21										
W21	12 21	23 59	0 51	7 33	4 33	3 47	8 4	3 36	0 48	13 51	0 46	20 16	0 31	23 26	0 23	21 53	0 48	2 44	14 57	22 10	22 23	23 9	13 12	6 21										
T 22	12 1	21 36	0n13	7 58	4 24	3 54	8 10	3 20	0 48	13 47	0 46	20 17	0 31	23 26	0 23	21 53	0 48	2 45	14 56	22 10	22 23	23 8	13 10	6 22										
F 23	11 41	18 18	1 17	8 25	4 14	4 2	8 14	3 5	0 47	13 42	0 46	20 18	0 31	23 26	0 23	21 53	0 48	2 46	14 56	22 10	22 24	23 6	13 8	6 22										
S 24	11 21	14 12	2 18	8 53	4 2	4 11	8 18	2 49	0 47	13 38	0 46	20 19	0 31	23 26	0 23	21 53	0 48	2 46	14 55	22 10	22 24	23 5	13 6	6 22										
S 25	11 0	9 29	3 13	9 21	3 49	4 21	8 21	2 34	0 46	13 34	0 46	20 20	0 31	23 26	0 23	21 53	0 48	2 47	14 55	22 11	22 24	23 3	13 5	6 22										
M26	10 40	4 20	4 1	9 49	3 34	4 31	8 23	2 18	0 46	13 29	0 46	20 20	0 31	23 26	0 23	21 53	0 48	2 48	14 54	22 12	22 25	23 2	13 3	6 23										
T 27	10 19	1n 4	4 37	10 16	3 18	4 42	8 24	2 2	0 45	13 25	0 47	20 21	0 31	23 26	0 23	21 53	0 48	2 49	14 54	22 13	22 25	23 0	13 1	6 23										
W28	9 58	6 30	5 0	10 42	3 1	4 53	8 24	1 46	0 45	13 20	0 47	20 22	0 31	23 26	0 23	21 54	0 48	2 49	14 53	22 14	22 25	22 58	13 0	6 23										
T 29	9 37	11 45	5 8	11 7	2 43	5 5	8 24	1 31	0 44	13 16	0 47	20 23	0 31	23 26	0 23	21 54	0 48	2 50	14 52	22 15	22 26	22 57	12 58	6 23										
F 30	9 16	16 32	5 0	11 30	2 25	5 17	8 22	1 15	0 44	13 12	0 47	20 24	0 31	23 27	0 23	21 54	0 48	2 51	14 52	22 16	22 26	22 55	12 56	6 24										
S 31	8n54	20n35	4n35	11n50	2s 6	5n29	8s20	0n59	0n43	13n 7	0n47	20s24	0s31	23s27	0s23	21s54	0n48	2s52	14n51	22s17	22s27	22s54	12n54	6s24										

# ASTRODIENST EPHEMERIS for the year 1991

## geocentric

SEPTEMBER 1991

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 38 39	8 <sup>h</sup> 43'2	28 <sup>h</sup> 15	23°D 4	24°R 1	29 <sup>h</sup> 49	27 <sup>h</sup> 35	1°R 7	9°R59	14°R 9	17 <sup>h</sup> 53	17°R38	16 <sup>h</sup> 16	14 <sup>h</sup> 12	4 <sup>h</sup> 40	S 1
M 2	22 42 35	9° 2'35	12 <sup>h</sup> 11	23 <sup>h</sup> 11	23 <sup>h</sup> 33	0 <sup>h</sup> 28	27°48	1 <sup>h</sup> 4	9 <sup>h</sup> 58	14 <sup>h</sup> 9	17°55	17°D37	16°13	14°19	4°46	M 2
T 3	22 46 32	10° 0'41	26°15	23°27	23° 8	1° 7	28° 1	1° 1	9°57	14° 8	17°56	17 <sup>h</sup> 38	16°10	14°25	4°52	T 3
W 4	22 50 28	10°58'48	10 <sup>h</sup> 33	23°52	22°45	1°45	28°14	0°58	9°56	14° 7	17°57	17°R39	16° 6	14°32	4°58	W 4
T 5	22 54 25	11°56'57	25° 1	24°25	22°24	2°24	28°27	0°55	9°55	14° 7	17°58	17°39	16° 3	14°38	5° 4	T 5
F 6	22 58 22	12°55'09	9 <sup>h</sup> 36	25° 6	22° 5	3° 3	28°40	0°52	9°55	14° 6	17°59	17°37	16° 0	14°45	5°11	F 6
S 7	23 2 18	13°53'22	24°11	25°55	21°49	3°42	28°53	0°50	9°54	14° 5	18° 1	17°33	15°57	14°52	5°17	S 7
S 8	23 6 15	14°51'37	8 <sup>h</sup> 42	26°51	21°35	4°20	29° 6	0°47	9°53	14° 5	18° 2	17°26	15°54	14°58	5°23	S 8
M 9	23 10 11	15°49'53	23° 2	27°55	21°23	4°59	29°18	0°45	9°53	14° 4	18° 3	17°17	15°51	15° 5	5°29	M 9
T 10	23 14 8	16°48'12	7 <sup>h</sup> 3	29° 6	21°14	5°38	29°31	0°42	9°52	14° 4	18° 5	17° 8	15°47	15°12	5°34	T 10
W11	23 18 4	17°46'32	20°44	0 <sup>h</sup> 22	21° 7	6°17	29°44	0°40	9°52	14° 3	18° 6	16°58	15°44	15°18	5°40	W11
T 12	23 22 1	18°44'53	4 <sup>h</sup> 0	1°45	21° 3	6°56	29°57	0°38	9°51	14° 3	18° 8	16°49	15°41	15°25	5°46	T 12
F 13	23 25 57	19°43'17	16°52	3°12	21°D 1	7°35	0 <sup>h</sup> 10	0°35	9°51	14° 2	18° 9	16°42	15°38	15°32	5°52	F 13
S 14	23 29 54	20°41'42	29°22	4°44	21° 1	8°14	0°22	0°33	9°51	14° 2	18°11	16°38	15°35	15°38	5°58	S 14
S 15	23 33 51	21°40'09	11 <sup>h</sup> 34	6°20	21° 3	8°53	0°35	0°31	9°51	14° 1	18°12	16°36	15°32	15°45	6° 3	S 15
M16	23 37 47	22°38'37	23°33	8° 0	21° 8	9°33	0°48	0°30	9°50	14° 1	18°14	16°D35	15°28	15°52	6° 9	M16
T 17	23 41 44	23°37'07	5 <sup>h</sup> 23	9°42	21°16	10°12	1° 0	0°28	9°50	14° 1	18°15	16°36	15°25	15°58	6°15	T 17
W18	23 45 40	24°35'39	17°11	11°27	21°25	10°51	1°13	0°26	9°50	14° 0	18°17	16°R36	15°22	16° 5	6°20	W18
T 19	23 49 37	25°34'12	29° 2	13°13	21°36	11°30	1°25	0°24	9°D50	14° 0	18°19	16°35	15°19	16°11	6°26	T 19
F 20	23 53 33	26°32'47	11 <sup>h</sup> 0	15° 2	21°50	12°10	1°38	0°23	9°50	14° 0	18°20	16°32	15°16	16°18	6°31	F 20
S 21	23 57 30	27°31'23	23° 9	16°51	22° 5	12°49	1°50	0°21	9°50	14° 0	18°22	16°27	15°12	16°25	6°36	S 21
S 22	0 1 26	28°30'01	5 <sup>h</sup> 32	18°41	22°23	13°28	2° 3	0°20	9°50	14° 0	18°24	16°19	15° 9	16°31	6°42	S 22
M23	0 5 23	29°28'42	18°12	20°32	22°42	14° 8	2°15	0°19	9°50	13°59	18°25	16° 9	15° 6	16°38	6°47	M23
T 24	0 9 20	0 <sup>h</sup> 27'24	1°Y 8	22°22	23° 4	14°47	2°27	0°18	9°51	13°59	18°27	15°57	15° 3	16°45	6°52	T 24
W25	0 13 16	1°26'08	14°19	24°13	23°27	15°27	2°40	0°17	9°51	13°59	18°29	15°45	15° 0	16°51	6°57	W25
T 26	0 17 13	2°24'54	27°45	26° 4	23°52	16° 7	2°52	0°16	9°51	13°D59	18°31	15°33	14°57	16°58	7° 2	T 26
F 27	0 21 9	3°23'42	11 <sup>h</sup> 22	27°54	24°18	16°46	3° 4	0°15	9°52	13°59	18°33	15°23	14°53	17° 5	7° 7	F 27
S 28	0 25 6	4°22'32	25° 8	29°44	24°47	17°26	3°16	0°14	9°52	13°59	18°34	15°16	14°50	17°11	7°12	S 28
S 29	0 29 2	5°21'25	9 <sup>h</sup> 1	1 <sup>h</sup> 34	25°16	18° 6	3°28	0°13	9°52	13°59	18°36	15°11	14°47	17°18	7°17	S 29
M30	0 32 59	6 <sup>h</sup> 20'20	23 <sup>h</sup> 0	3 <sup>h</sup> 23	25°48	18°45	3 <sup>h</sup> 40	0 <sup>h</sup> 13	9 <sup>h</sup> 53	14 <sup>h</sup> 0	18 <sup>h</sup> 38	15 <sup>h</sup> 9	14 <sup>h</sup> 44	17 <sup>h</sup> 25	7 <sup>h</sup> 22	M30

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
S 1	8n33	23n34	3n54	12n 8	1s48	5n42	8s17	0n43	0n43	13n 3	0n47	20s25	0s31	23s27	0s23	21s54	0n48	2s52	14n51	22s17	22s27	22s52	12n53	6s24
M 2	8 11	25 13	2 59	12 23	1 29	5 54	8 13	0 27	0 42	12 58	0 47	20 26	0 31	23 27	0 23	21 54	0 48	2 53	14 50	22 17	22 27	22 51	12 51	6 25
T 3	7 49	25 16	1 53	12 35	1 11	6 6	8 8	0 12	0 42	12 54	0 47	20 27	0 31	23 27	0 23	21 54	0 47	2 54	14 50	22 17	22 28	22 49	12 49	6 25
W 4	7 27	23 39	0 38	12 44	0 53	6 19	8 3	0s 4	0 41	12 50	0 47	20 27	0 31	23 27	0 23	21 54	0 47	2 55	14 49	22 17	22 28	22 47	12 47	6 25
T 5	7 5	20 29	0s40	12 50	0 35	6 31	7 57	0 20	0 40	12 45	0 47	20 28	0 31	23 27	0 23	21 54	0 47	2 56	14 49	22 17	22 29	22 46	12 46	6 26
F 6	6 43	16 0	1 55	12 52	0 19	6 43	7 51	0 36	0 40	12 41	0 47	20 28	0 31	23 27	0 23	21 55	0 47	2 57	14 48	22 17	22 29	22 44	12 44	6 26
S 7	6 20	10 35	3 3	12 50	0 3	6 55	7 44	0 52	0 39	12 36	0 47	20 29	0 31	23 27	0 23	21 55	0 47	2 57	14 48	22 17	22 29	22 43	12 42	6 26
S 8	5 58	4 37	3 58	12 45	0n12	7 6	7 36	1 8	0 39	12 32	0 48	20 30	0 31	23 27	0 23	21 55	0 47	2 58	14 47	22 18	22 30	22 41	12 40	6 27
M 9	5 35	1s29	4 38	12 36	0 26	7 17	7 28	1 24	0 38	12 28	0 48	20 30	0 32	23 27	0 23	21 55	0 47	2 59	14 47	22 19	22 30	22 39	12 39	6 27
T 10	5 13	7 23	5 0	12 24	0 39	7 28	7 20	1 40	0 38	12 23	0 48	20 31	0 32	23 27	0 23	21 55	0 47	3 0	14 46	22 21	22 30	22 38	12 37	6 27
W11	4 50	12 47	5 4	12 8	0 51	7 38	7 11	1 55	0 37	12 19	0 48	20 31	0 32	23 27	0 23	21 55	0 47	3 1	14 46	22 22	22 31	22 36	12 35	6 28
T 12	4 27	17 25	4 51	11 49	1 2	7 48	7 2	2 11	0 37	12 14	0 48	20 32	0 32	23 27	0 23	21 55	0 47	3 1	14 45	22 23	22 31	22 34	12 33	6 28
F 13	4 4	21 5	4 24	11 26	1 11	7 58	6 53	2 27	0 36	12 10	0 48	20 32	0 32	23 27	0 23	21 55	0 47	3 2	14 45	22 24	22 32	22 33	12 31	6 28
S 14	3 41	23 40	3 44	11 1	1 20	8 7	6 44	2 43	0 36	12 6	0 48	20 33	0 32	23 27	0 23	21 55	0 47	3 3	14 44	22 24	22 32	22 31	12 30	6 29
S 15	3 18	25 4	2 56	10 32	1 27	8 15	6 34	2 59	0 35	12 1	0 48	20 33	0 32	23 27	0 23	21 55	0 47	3 4	14 44	22 25	22 32	22 30	12 28	6 29
M16	2 55	25 17	2 0	10 1	1 33	8 23	6 24	3 15	0 35	11 57	0 48	20 34	0 32	23 27	0 23	21 55	0 47	3 5	14 43	22 25	22 33	22 28	12 26	6 30
T 17	2 32	24 19	0 59	9 27	1 39	8 30	6 14	3 31	0 34	11 52	0 49	20 34	0 32	23 27	0 23	21 56	0 47	3 6	14 43	22 25	22 33	22 26	12 24	6 30
W18	2 9	22 17	0n 3	8 51	1 43	8 37	6 4	3 47	0 34	11 48	0 49	20 35	0 32	23 27	0 23	21 56	0 47	3 7	14 43	22 25	22 33	22 25	12 23	6 31
T 19	1 46	19 17	1 6	8 14	1 46	8 43	5 54	4 3	0 33	11 44	0 49	20 35	0 32	23 27	0 23	21 56	0 47	3 7	14 42	22 25	22 34	22 23	12 21	6 31
F 20	1 22	15 27	2 6	7 34	1 48	8 49	5 43	4 18	0 33	11 39	0 49	20 35	0 32	23 27	0 23	21 56	0 47	3 8	14 42	22 25	22 34	22 21	12 19	6 31
S 21	0 59	10 57	3 1	6 53	1 50	8 53	5 33	4 34	0 32	11 35	0 49	20 36	0 32	23 27	0 23	21 56	0 47	3 9	14 41	22 26	22 34	22 19	12 18	6 32
S 22	0 36	5 56	3 49	6 10	1 51	8 58	5 23	4 50	0 31	11 31	0 49	20 36	0 32	23 27	0 23	21 56	0 47	3 10	14 41	22 27	22 35	22 18	12 16	6 32
M23	0 12	0 35	4 27	5 27	1 50	9 1	5 12	5 6	0 31	11 26	0 49	20 36	0 32	23 27	0 23	21 56	0 47	3 11	14 40	22 28	22 35	22 16	12 14	6 33
T 24	0s11	4n54	4 51	4 42	1 50	9 4	5 2	5 22	0 30	11 22	0 49	20 37	0 32	23 27	0 23	21 56	0 47	3 12	14 40	22 29	22 36	22 14	12 12	6 33
W25	0 34	10 16	5 1	3 57	1 48	9 7	4 52	5 37	0 30	11 18	0 49	20 37	0 32	23 27	0 23	21 56	0 47	3 13	14 40	22 31	22 36	22 13	12 11	6 34
T 26	0 58	15 15	4 54	3 11	1 46	9 8	4 41	5 53	0 29	11 14	0 50	20 37	0 32	23 27	0 22	21 56	0 47	3 13	14 39	22 32	22 36	22 11	12 9	6 34
F 27	1 21	19 32	4 31	2 25	1 43	9 9	4 31	6 9	0 29	11 9	0 50	20 37	0 32	23 27	0 22	21 56	0 47	3 14	14 39	22 33	22 37	22 9	12 7	6 35
S 28	1 44	22 48	3 52	1 38	1 40	9 10	4 21	6 25	0 28	11 5	0 50	20 38	0 32	23 27	0 22	21 56	0 47	3 15	14 38	22 34	22 37	22 8	12 6	6 35
S 29	2 8	24 45	2 59	0 51	1 37	9 10	4 11	6 40	0 28	11 1	0 50	20 38	0 32	23 27	0 22	21 56	0 47	3 16	14 38	22 35	22 37	22 6	12 4	6 36
M30	2s31	25n10	1n54	0n 5	1n33	9n 9	4s 1	6s56	0n27	10n56	0n50	20s38	0s32	23s27	0s22	21s56	0n47	3s17	14n38	22s35	22s38	22s 4	12n 2	6s36

ASTRODIENST EPHEMERIS for the year 1991  
geocentric

OCTOBER 1991

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 36 55	7♏19'18	7♏ 3	5♏11	26♏20	19♏25	3♏52	0°R12	9♏54	14♏ 0	18♏40	15°R 9	14♏41	17♏31	7♏26	T 1
W 2	0 40 52	8°18'18	21°10	6°58	26°55	20° 5	4° 4	0♏12	9°54	14° 0	18°42	15°R 9	14°38	17°38	7°31	W 2
T 3	0 44 48	9°17'20	5♏20	8°45	27°30	20°45	4°16	0°12	9°55	14° 0	18°44	15° 8	14°34	17°45	7°36	T 3
F 4	0 48 45	10°16'24	19°31	10°31	28° 7	21°25	4°28	0°12	9°56	14° 0	18°46	15° 5	14°31	17°51	7°40	F 4
S 5	0 52 42	11°15'30	3♏41	12°16	28°45	22° 5	4°39	0°D12	9°56	14° 1	18°48	14°59	14°28	17°58	7°45	S 5
S 6	0 56 38	12°14'39	17°47	14° 0	29°24	22°45	4°51	0°12	9°57	14° 1	18°50	14°50	14°25	18° 4	7°49	S 6
M 7	1 0 35	13°13'50	1♏44	15°43	0♏ 5	23°25	5° 3	0°12	9°58	14° 1	18°52	14°39	14°22	18°11	7°53	M 7
T 8	1 4 31	14°13'03	15°27	17°26	0°46	24° 5	5°14	0°12	9°59	14° 2	18°54	14°26	14°18	18°18	7°57	T 8
W 9	1 8 28	15°12'18	28°54	19° 8	1°29	24°45	5°26	0°12	10° 0	14° 2	18°56	14°13	14°15	18°24	8° 2	W 9
T 10	1 12 24	16°11'35	12♏ 1	20°49	2°13	25°26	5°37	0°13	10° 1	14° 2	18°58	14° 2	14°12	18°31	8° 6	T 10
F 11	1 16 21	17°10'54	24°48	22°29	2°57	26° 6	5°48	0°13	10° 2	14° 3	19° 1	13°52	14° 9	18°38	8°10	F 11
S 12	1 20 17	18°10'15	7♏15	24° 9	3°43	26°46	6° 0	0°14	10° 3	14° 3	19° 3	13°45	14° 6	18°44	8°14	S 12
S 13	1 24 14	19° 9'38	19°26	25°48	4°29	27°26	6°11	0°15	10° 4	14° 4	19° 5	13°41	14° 3	18°51	8°17	S 13
M14	1 28 11	20° 9'02	1♏24	27°26	5°17	28° 7	6°22	0°16	10° 6	14° 5	19° 7	13°39	13°59	18°58	8°21	M14
T 15	1 32 7	21° 8'29	13°14	29° 3	6° 5	28°47	6°33	0°16	10° 7	14° 5	19° 9	13°D39	13°56	19° 4	8°25	T 15
W16	1 36 4	22° 7'57	25° 2	0♏40	6°54	29°28	6°44	0°18	10° 8	14° 6	19°11	13°R39	13°53	19°11	8°28	W16
T 17	1 40 0	23° 7'27	6♏53	2°16	7°44	0♏ 8	6°55	0°19	10°10	14° 6	19°14	13°38	13°50	19°18	8°32	T 17
F 18	1 43 57	24° 6'58	18°53	3°52	8°35	0°49	7° 6	0°20	10°11	14° 7	19°16	13°36	13°47	19°24	8°35	F 18
S 19	1 47 53	25° 6'32	1♏ 5	5°26	9°26	1°30	7°16	0°21	10°12	14° 8	19°18	13°31	13°43	19°31	8°39	S 19
S 20	1 51 50	26° 6'07	13°36	7° 0	10°18	2°10	7°27	0°23	10°14	14° 9	19°20	13°23	13°40	19°37	8°42	S 20
M21	1 55 46	27° 5'44	26°26	8°34	11°11	2°51	7°37	0°24	10°16	14° 9	19°23	13°14	13°37	19°44	8°45	M21
T 22	1 59 43	28° 5'22	9♏38	10° 7	12° 5	3°32	7°48	0°26	10°17	14°10	19°25	13° 2	13°34	19°51	8°48	T 22
W23	2 3 40	29° 5'03	23°10	11°39	12°59	4°12	7°58	0°28	10°19	14°11	19°27	12°50	13°31	19°57	8°51	W23
T 24	2 7 36	0♏ 4'46	7♏ 0	13°11	13°54	4°53	8° 9	0°29	10°20	14°12	19°29	12°38	13°28	20° 4	8°54	T 24
F 25	2 11 33	1° 4'31	21° 3	14°42	14°49	5°34	8°19	0°31	10°22	14°13	19°32	12°28	13°24	20°11	8°57	F 25
S 26	2 15 29	2° 4'17	5♏15	16°13	15°45	6°15	8°29	0°33	10°24	14°14	19°34	12°21	13°21	20°17	8°59	S 26
S 27	2 19 26	3° 4'06	19°31	17°43	16°42	6°56	8°39	0°36	10°26	14°15	19°36	12°17	13°18	20°24	9° 2	S 27
M28	2 23 22	4° 3'58	3♏48	19°12	17°39	7°37	8°49	0°38	10°28	14°16	19°39	12°15	13°15	20°31	9° 5	M28
T 29	2 27 19	5° 3'51	18° 1	20°41	18°37	8°18	8°58	0°40	10°30	14°17	19°41	12°D14	13°12	20°37	9° 7	T 29
W30	2 31 15	6° 3'47	2♏ 9	22°10	19°35	8°59	9° 8	0°43	10°32	14°18	19°43	12°R15	13° 9	20°44	9° 9	W30
T 31	2 35 12	7♏ 3'45	16♏12	23♏37	20♏34	9♏41	9♏18	0♏45	10♏34	14♏19	19♏46	12♏15	13♏ 5	20♏51	9♏12	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	2s54	23n58	0n43	0s42	1n28	9n 7	3s51	7s11	0n27	10n52	0n50	20s38	0s32	23s27	0s22	21s56
W 2	3 18	21 15	0s32	1 29	1 24	9 5	3 41	7 27	0 26	10 48	0 50	20 38	0 32	23 27	0 22	21 56
T 3	3 41	17 15	1 45	2 16	1 19	9 2	3 31	7 42	0 25	10 44	0 51	20 38	0 32	23 27	0 22	21 56
F 4	4 4	12 15	2 51	3 2	1 13	8 59	3 21	7 58	0 25	10 40	0 51	20 38	0 32	23 27	0 22	21 56
S 5	4 27	6 38	3 47	3 49	1 8	8 55	3 12	8 13	0 24	10 36	0 51	20 38	0 32	23 26	0 22	21 56
S 6	4 50	0 43	4 28	4 34	1 2	8 50	3 2	8 29	0 24	10 31	0 51	20 38	0 32	23 26	0 22	21 56
M 7	5 13	5s10	4 53	5 20	0 56	8 45	2 53	8 44	0 23	10 27	0 51	20 38	0 32	23 26	0 22	21 56
T 8	5 36	10 42	5 0	6 5	0 50	8 39	2 44	8 59	0 23	10 23	0 51	20 38	0 32	23 26	0 22	21 56
W 9	5 59	15 36	4 51	6 49	0 43	8 32	2 35	9 15	0 22	10 19	0 51	20 38	0 33	23 26	0 22	21 56
T 10	6 22	19 39	4 26	7 33	0 37	8 25	2 26	9 30	0 22	10 15	0 52	20 38	0 33	23 26	0 22	21 56
F 11	6 45	22 39	3 48	8 17	0 30	8 18	2 17	9 45	0 21	10 11	0 52	20 38	0 33	23 26	0 22	21 56
S 12	7 8	24 29	3 0	9 0	0 24	8 9	2 8	10 0	0 20	10 7	0 52	20 38	0 33	23 26	0 22	21 56
S 13	7 30	25 5	2 5	9 42	0 17	8 1	1 59	10 15	0 20	10 3	0 52	20 38	0 33	23 26	0 22	21 56
M14	7 53	24 30	1 4	10 24	0 10	7 51	1 51	10 30	0 19	9 59	0 52	20 38	0 33	23 26	0 22	21 56
T 15	8 15	22 49	0 2	11 5	0 3	7 41	1 43	10 45	0 19	9 55	0 52	20 38	0 33	23 26	0 22	21 56
W16	8 37	20 8	1n 0	11 46	0s 4	7 31	1 34	11 0	0 18	9 51	0 52	20 37	0 33	23 25	0 22	21 56
T 17	8 59	16 37	2 0	10 26	0 10	7 20	1 26	11 15	0 18	9 47	0 53	20 37	0 33	23 25	0 22	21 56
F 18	9 21	12 23	2 55	13 5	0 17	7 8	1 18	11 29	0 17	9 43	0 53	20 37	0 33	23 25	0 22	21 56
S 19	9 43	7 36	3 44	13 43	0 24	6 56	1 11	11 44	0 17	9 40	0 53	20 37	0 33	23 25	0 22	21 56
S 20	10 5	2 25	4 22	14 21	0 31	6 44	1 3	11 59	0 16	9 36	0 53	20 36	0 33	23 25	0 22	21 56
M21	10 26	3n 0	4 49	14 57	0 38	6 31	0 55	12 13	0 15	9 32	0 53	20 36	0 33	23 25	0 22	21 56
T 22	10 48	8 25	5 1	15 33	0 45	6 17	0 48	12 28	0 15	9 28	0 53	20 36	0 33	23 25	0 22	21 56
W23	11 9	13 35	4 57	16 9	0 51	6 3	0 41	12 42	0 14	9 25	0 54	20 35	0 33	23 25	0 22	21 56
T 24	11 30	18 11	4 35	16 43	0 58	5 49	0 34	12 56	0 14	9 21	0 54	20 35	0 33	23 24	0 22	21 56
F 25	11 51	21 49	3 57	17 17	1 4	5 34	0 27	13 10	0 13	9 17	0 54	20 35	0 33	23 24	0 22	21 56
S 26	12 12	24 11	3 3	17 49	1 11	5 18	0 20	13 24	0 13	9 14	0 54	20 34	0 33	23 24	0 22	21 55
S 27	12 32	24 59	1 58	18 21	1 17	5 3	0 13	13 39	0 12	9 10	0 54	20 34	0 33	23 24	0 22	21 55
M28	12 53	24 8	0 45	18 52	1 24	4 46	0 7	13 52	0 11	9 7	0 55	20 33	0 33	23 24	0 22	21 55
T 29	13 13	21 43	0s31	19 22	1 30	4 30	0 1	14 6	0 11	9 3	0 55	20 33	0 33	23 24	0 22	21 55
W30	13 33	17 59	1 44	19 51	1 36	4 13	0n 6	14 20	0 10	9 0	0 55	20 32	0 33	23 23	0 22	21 55
T 31	13s52	13n16	2s51	20s19	1s41	3n55	0n12	14s34	0n10	8n56	0n55	20s32	0s33	23s23	0s22	21s55

Julian Day Number = 2448530.5, Delta T = 58.12 sec  
Ecliptic obliquity = 23°26'28", Nutation = 0°00'16", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 24°37'30", Lahiri = 23°44'31"

# ASTRODIENST EPHEMERIS for the year 1991

## geocentric

NOVEMBER 1991

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	2 39 9	8♈ 3'44	0♈ 8	25♈ 5	21♈ 33	10♈ 22	9♈ 27	0♈ 48	10♈ 36	14♈ 20	19♈ 48	12°R13	13♈ 2	20♈ 57	9♈ 14	F 1
S 2	2 43 5	9° 3'47	13°57	26°31	22°33	11° 3	9°37	0°50	10°38	14°22	19°51	12♈ 8	12°59	21° 4	9°16	S 2
S 3	2 47 2	10° 3'51	27°37	27°57	23°33	11°44	9°46	0°53	10°40	14°23	19°53	12° 1	12°56	21°11	9°18	S 3
M 4	2 50 58	11° 3'57	11♈ 8	29°22	24°34	12°26	9°55	0°56	10°42	14°24	19°55	11°52	12°53	21°17	9°20	M 4
T 5	2 54 55	12° 4'05	24°26	0♈ 47	25°35	13° 7	10° 4	0°59	10°44	14°25	19°58	11°41	12°49	21°24	9°21	T 5
W 6	2 58 51	13° 4'16	7♈ 32	2°11	26°36	13°49	10°13	1° 2	10°47	14°26	20° 0	11°30	12°46	21°30	9°23	W 6
T 7	3 2 48	14° 4'28	20°22	3°34	27°38	14°30	10°22	1° 5	10°49	14°28	20° 3	11°20	12°43	21°37	9°25	T 7
F 8	3 6 44	15° 4'42	2♈ 56	4°56	28°40	15°12	10°31	1° 8	10°51	14°29	20° 5	11°12	12°40	21°44	9°26	F 8
S 9	3 10 41	16° 4'57	15°16	6°17	29°43	15°53	10°39	1°12	10°54	14°31	20° 7	11° 6	12°37	21°50	9°27	S 9
S 10	3 14 38	17° 5'14	27°22	7°37	0♈ 46	16°35	10°48	1°15	10°56	14°32	20°10	11° 3	12°34	21°57	9°29	S 10
M 11	3 18 34	18° 5'33	9♈ 18	8°56	1°49	17°17	10°56	1°19	10°59	14°33	20°12	11°D 1	12°30	22° 4	9°30	M 11
T 12	3 22 31	19° 5'53	21° 7	10°13	2°52	17°59	11° 4	1°22	11° 1	14°35	20°15	11° 2	12°27	22°10	9°31	T 12
W 13	3 26 27	20° 6'15	2♈ 54	11°29	3°56	18°40	11°12	1°26	11° 4	14°36	20°17	11° 3	12°24	22°17	9°32	W 13
T 14	3 30 24	21° 6'38	14°44	12°44	5° 1	19°22	11°20	1°30	11° 6	14°38	20°20	11° 4	12°21	22°24	9°33	T 14
F 15	3 34 20	22° 7'03	26°42	13°56	6° 5	20° 4	11°28	1°34	11° 9	14°39	20°22	11°R 4	12°18	22°30	9°34	F 15
S 16	3 38 17	23° 7'29	8♈ 53	15° 7	7°10	20°46	11°36	1°37	11°11	14°41	20°24	11° 3	12°15	22°37	9°34	S 16
S 17	3 42 13	24° 7'56	21°24	16°15	8°15	21°28	11°43	1°41	11°14	14°42	20°27	10°59	12°11	22°44	9°35	S 17
M 18	3 46 10	25° 8'24	4♈ 16	17°21	9°21	22°10	11°51	1°46	11°17	14°44	20°29	10°54	12° 8	22°50	9°35	M 18
T 19	3 50 7	26° 8'54	17°33	18°23	10°26	22°52	11°58	1°50	11°20	14°46	20°32	10°47	12° 5	22°57	9°36	T 19
W 20	3 54 3	27° 9'25	1♈ 16	19°22	11°32	23°34	12° 5	1°54	11°22	14°47	20°34	10°40	12° 2	23° 3	9°36	W 20
T 21	3 58 0	28° 9'58	15°22	20°18	12°38	24°17	12°12	1°58	11°25	14°49	20°36	10°32	11°59	23°10	9°36	T 21
F 22	4 1 56	29°10'32	29°46	21° 9	13°45	24°59	12°19	2° 3	11°28	14°51	20°39	10°26	11°55	23°17	9°R36	F 22
S 23	4 5 53	0♈ 11'07	14♈ 24	21°55	14°52	25°41	12°26	2° 7	11°31	14°52	20°41	10°22	11°52	23°23	9°36	S 23
S 24	4 9 49	1°11'44	29° 8	22°36	15°59	26°24	12°32	2°12	11°34	14°54	20°44	10°20	11°49	23°30	9°36	S 24
M 25	4 13 46	2°12'23	13♈ 50	23°10	17° 6	27° 6	12°39	2°16	11°37	14°56	20°46	10°D19	11°46	23°37	9°36	M 25
T 26	4 17 42	3°13'03	28°25	23°38	18°13	27°48	12°45	2°21	11°40	14°58	20°48	10°20	11°43	23°43	9°35	T 26
W 27	4 21 39	4°13'45	12♈ 49	23°58	19°21	28°31	12°51	2°26	11°43	15° 0	20°51	10°21	11°40	23°50	9°35	W 27
T 28	4 25 36	5°14'29	26°58	24° 9	20°29	29°13	12°57	2°31	11°46	15° 1	20°53	10°23	11°36	23°57	9°34	T 28
F 29	4 29 32	6°15'13	10♈ 52	24°R11	21°37	29°56	13° 3	2°36	11°49	15° 3	20°56	10°R23	11°33	24° 3	9°34	F 29
S 30	4 33 29	7♈ 16'00	24♈ 31	24° 3	22°45	0♈ 39	13° 9	2°41	11°52	15° 5	20°58	10°S22	11°S30	24°S10	9°S33	S 30

Day	☉	☾	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	14s12	7n54	3s46	20s46	1s47	3n37	0n18	14s47	0n 9	8n53	0n55	20s31	0s33	23s23	0s22	21s55	0n45	3s43	14n29	22s53	22s48	21s 6	11n15	6s56	
S 2	14 31	2 11	4 28	21 12	1 52	3 19	0 23	15 1	0 8	8 49	0 56	20 31	0 33	23 23	0 22	21 55	0 45	3 44	14 29	22 53	22 48	21 4	11 14	6 56	
S 3	14 50	3s34	4 55	21 37	1 58	3 0	0 29	15 14	0 8	8 46	0 56	20 30	0 33	23 23	0 22	21 55	0 45	3 44	14 29	22 54	22 49	21 3	11 13	6 57	
M 4	15 9	9 4	5 4	22 1	2 3	2 41	0 35	15 27	0 7	8 43	0 56	20 29	0 33	23 23	0 22	21 55	0 45	3 45	14 29	22 55	22 49	21 1	11 12	6 58	
T 5	15 27	14 4	4 57	22 24	2 7	2 22	0 40	15 40	0 7	8 40	0 56	20 29	0 33	23 22	0 22	21 55	0 45	3 46	14 28	22 56	22 49	20 59	11 11	6 58	
W 6	15 46	18 20	4 34	22 45	2 12	2 3	0 45	15 53	0 6	8 36	0 56	20 28	0 33	23 22	0 22	21 55	0 45	3 46	14 28	22 57	22 50	20 57	11 10	6 59	
T 7	16 4	21 39	3 57	23 6	2 16	1 43	0 50	16 6	0 6	8 33	0 57	20 27	0 33	23 22	0 22	21 54	0 45	3 47	14 28	22 57	22 50	20 55	11 9	7 0	
F 8	16 22	23 51	3 10	23 25	2 20	1 22	0 55	16 19	0 5	8 30	0 57	20 27	0 33	23 22	0 22	21 54	0 45	3 48	14 28	22 58	22 50	20 53	11 8	7 1	
S 9	16 39	24 51	2 14	23 43	2 24	1 2	1 0	16 32	0 4	8 27	0 57	20 26	0 33	23 22	0 22	21 54	0 45	3 48	14 28	22 59	22 51	20 51	11 7	7 1	
S 10	16 56	24 38	1 13	24 0	2 27	0 41	1 5	16 44	0 4	8 24	0 57	20 25	0 33	23 21	0 22	21 54	0 45	3 49	14 28	22 59	22 51	20 49	11 6	7 2	
M 11	17 13	23 16	0 9	24 16	2 30	0 20	1 9	16 57	0 3	8 21	0 57	20 25	0 33	23 21	0 22	21 54	0 45	3 50	14 28	22 59	22 51	20 47	11 5	7 3	
T 12	17 30	20 53	0n54	24 30	2 33	0s 1	1 13	17 9	0 3	8 18	0 58	20 24	0 33	23 21	0 22	21 54	0 45	3 51	14 28	22 59	22 51	20 45	11 4	7 3	
W 13	17 46	17 38	1 55	24 43	2 35	0 23	1 18	17 21	0 2	8 15	0 58	20 23	0 33	23 21	0 22	21 54	0 45	3 51	14 28	22 59	22 52	20 43	11 3	7 4	
T 14	18 2	13 41	2 52	24 54	2 36	0 44	1 22	17 33	0 1	8 12	0 58	20 22	0 33	23 21	0 22	21 54	0 45	3 52	14 28	22 59	22 52	20 42	11 2	7 5	
F 15	18 18	9 9	3 41	25 5	2 37	1 6	1 26	17 45	0 1	8 10	0 58	20 21	0 33	23 20	0 22	21 53	0 45	3 52	14 28	22 59	22 52	20 40	11 1	7 5	
S 16	18 33	4 11	4 22	25 13	2 38	1 28	1 29	17 57	0 0	8 7	0 58	20 21	0 33	23 20	0 22	21 53	0 45	3 53	14 28	22 59	22 53	20 38	11 0	7 6	
S 17	18 48	1n 3	4 51	25 21	2 38	1 51	1 33	18 8	0s 0	8 4	0 59	20 20	0 33	23 20	0 22	21 53	0 45	3 54	14 28	22 59	22 53	20 36	10 59	7 7	
M 18	19 3	6 23	5 7	25 27	2 37	2 13	1 37	18 20	0 1	8 2	0 59	20 19	0 33	23 20	0 22	21 53	0 45	3 54	14 28	23 0	22 53	20 34	10 59	7 7	
T 19	19 17	11 37	5 7	25 31	2 36	2 36	1 40	18 31	0 2	7 59	0 59	20 18	0 33	23 19	0 22	21 53	0 45	3 55	14 27	23 0	22 53	20 32	10 58	7 8	
W 20	19 31	16 26	4 50	25 34	2 33	2 59	1 43	18 42	0 2	7 57	0 59	20 17	0 34	23 19	0 22	21 53	0 45	3 55	14 27	23 1	22 54	20 30	10 57	7 9	
T 21	19 45	20 30	4 14	25 35	2 30	3 22	1 46	18 53	0 3	7 54	1 0	20 16	0 34	23 19	0 22	21 53	0 45	3 56	14 28	23 1	22 54	20 28	10 56	7 9	
F 22	19 58	23 24	3 22	25 35	2 26	3 45	1 49	19 4	0 3	7 52	1 0	20 15	0 34	23 19	0 22	21 52	0 45	3 57	14 28	23 2	22 54	20 26	10 56	7 10	
S 23	20 11	24 47	2 16	25 33	2 22	4 8	1 52	19 15	0 4	7 49	1 0	20 14	0 34	23 18	0 22	21 52	0 45	3 57	14 28	23 2	22 55	20 24	10 55	7 11	
S 24	20 24	24 27	1 1	25 29	2 16	4 31	1 55	19 25	0 5	7 47	1 0	20 13	0 34	23 18	0 22	21 52	0 45	3 58	14 28	23 2	22 55	20 22	10 55	7 12	
M 25	20 36	22 24	0s19	25 24	2 8	4 55	1 57	19 36	0 5	7 45	1 1	20 12	0 34	23 18	0 22	21 52	0 45	3 58	14 28	23 2	22 55	20 20	10 54	7 12	
T 26	20 48	18 54	1 37	25 17	2 0	5 18	2 0	19 46	0 6	7 43	1 1	20 11	0 34	23 18	0 22	21 52	0 45	3 59	14 28	23 2	22 55	20 18	10 53	7 13	
W 27	21 0	14 17	2 48	25 8	1 50	5 41	2 2	19 56	0 6	7 40	1 1	20 10	0 34	23 17	0 22	21 52	0 45	3 59	14 28	23 2	22 56	20 16	10 53	7 14	
T 28	21 11	8 58	3 47	24 58	1 29	6 5	2 4	20 6	0 7	7 38	1 1	20 9	0 34	23 17	0 22	21 51	0 45	4 0	14 28	23 2	22 56	20 14	10 52	7 14	
F 29	21 21	3 17	4 32	24 45	1 37	6 28	2 6	20 16	0 8	7 36	1 2	20 8	0 34	23 17	0 22	21 51	0 45	4 0	14 28	23 2	22 56	20 12	10 52	7 15	
S 30	21s31	2s25	5s 1	24s31	1s13	6s52	2n 8	20s25	0s 8	7n34	1n 2	20s 7	0s34	23s16	0s22	21s51	0n45	4s 1	14n28	23s 2	22s57	20s10	10m51	7s16	

ASTRODIENST EPHEMERIS for the year 1991  
geocentric

DECEMBER 1991

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 37 25	8♂16'48	7♂54	23°R44	23♂54	1♂21	13♂14	2♂46	11♂55	15♂7	21♂0	10°R19	11♂27	24♂17	9°R32	S 1
M 2	4 41 22	9°17'37	21° 4	23♂15	25° 2	2° 4	13°20	2°51	11°58	15° 9	21° 3	10♂14	11°24	24°23	9♂31	M 2
T 3	4 45 18	10°18'28	3♂59	22°34	26°11	2°47	13°25	2°56	12° 1	15°11	21° 5	10° 9	11°21	24°30	9°30	T 3
W 4	4 49 15	11°19'21	16°42	21°42	27°20	3°30	13°30	3° 1	12° 5	15°13	21° 7	10° 4	11°17	24°37	9°29	W 4
T 5	4 53 11	12°20'14	29°12	20°41	28°29	4°12	13°35	3° 7	12° 8	15°15	21° 9	9°59	11°14	24°43	9°28	T 5
F 6	4 57 8	13°21'09	11♂31	19°31	29°39	4°55	13°39	3°12	12°11	15°17	21°12	9°56	11°11	24°50	9°26	F 6
S 7	5 1 5	14°22'05	23°39	18°14	0♂48	5°38	13°44	3°18	12°14	15°19	21°14	9°53	11° 8	24°57	9°25	S 7
S 8	5 5 1	15°23'02	5♂38	16°53	1°58	6°21	13°48	3°23	12°18	15°21	21°16	9°D52	11° 5	25° 3	9°23	S 8
M 9	5 8 58	16°23'59	17°30	15°30	3° 8	7° 4	13°52	3°29	12°21	15°23	21°19	9°52	11° 1	25°10	9°22	M 9
T 10	5 12 54	17°24'58	29°18	14° 8	4°18	7°47	13°56	3°34	12°24	15°25	21°21	9°53	10°58	25°16	9°20	T 10
W11	5 16 51	18°25'57	11♂4	12°50	5°28	8°31	14° 0	3°40	12°28	15°27	21°23	9°55	10°55	25°23	9°18	W11
T 12	5 20 47	19°26'56	22°54	11°38	6°38	9°14	14° 4	3°46	12°31	15°29	21°25	9°57	10°52	25°30	9°16	T 12
F 13	5 24 44	20°27'57	4♂50	10°35	7°48	9°57	14° 7	3°52	12°34	15°31	21°27	9°58	10°49	25°36	9°14	F 13
S 14	5 28 40	21°28'58	16°59	9°41	8°59	10°40	14°10	3°57	12°38	15°33	21°30	9°R59	10°46	25°43	9°12	S 14
S 15	5 32 37	22°29'59	29°25	8°58	10° 9	11°24	14°14	4° 3	12°41	15°35	21°32	9°59	10°42	25°50	9°10	S 15
M16	5 36 34	23°31'01	12♂12	8°26	11°20	12° 7	14°16	4° 9	12°44	15°38	21°34	9°58	10°39	25°56	9° 7	M16
T 17	5 40 30	24°32'03	25°24	8° 6	12°31	12°51	14°19	4°15	12°48	15°40	21°36	9°56	10°36	26° 3	9° 5	T 17
W18	5 44 27	25°33'06	9♂4	7°D56	13°42	13°34	14°22	4°21	12°51	15°42	21°38	9°54	10°33	26°10	9° 2	W18
T 19	5 48 23	26°34'09	23°10	7°56	14°53	14°17	14°24	4°28	12°55	15°44	21°40	9°53	10°30	26°16	9° 0	T 19
F 20	5 52 20	27°35'13	7♂42	8° 6	16° 4	15° 1	14°26	4°34	12°58	15°46	21°42	9°51	10°27	26°23	8°57	F 20
S 21	5 56 16	28°36'17	22°33	8°24	17°16	15°45	14°28	4°40	13° 2	15°48	21°44	9°50	10°23	26°30	8°55	S 21
S 22	6 0 13	29°37'22	7♂36	8°51	18°27	16°28	14°30	4°46	13° 5	15°51	21°46	9°D50	10°20	26°36	8°52	S 22
M23	6 4 10	0♂38'27	22°42	9°24	19°38	17°12	14°32	4°53	13° 9	15°53	21°48	9°50	10°17	26°43	8°49	M23
T 24	6 8 6	1°39'33	7♂42	10° 4	20°50	17°56	14°33	4°59	13°12	15°55	21°50	9°50	10°14	26°50	8°46	T 24
W25	6 12 3	2°40'39	22°29	10°50	22° 2	18°40	14°34	5° 5	13°16	15°57	21°52	9°51	10°11	26°56	8°43	W25
T 26	6 15 59	3°41'46	6♂57	11°41	23°14	19°23	14°35	5°12	13°19	15°59	21°54	9°52	10° 7	27° 3	8°40	T 26
F 27	6 19 56	4°42'53	21° 2	12°36	24°25	20° 7	14°36	5°18	13°23	16° 2	21°56	9°52	10° 4	27°10	8°36	F 27
S 28	6 23 52	5°44'01	4♂44	13°35	25°37	20°51	14°37	5°25	13°27	16° 4	21°58	9°R52	10° 1	27°16	8°33	S 28
S 29	6 27 49	6°45'10	18° 4	14°38	26°49	21°35	14°37	5°31	13°30	16° 6	22° 0	9°52	9°58	27°23	8°30	S 29
M30	6 31 45	7°46'19	1♂2	15°44	28° 2	22°19	14°38	5°38	13°34	16° 8	22° 2	9°52	9°55	27°30	8°26	M30
T 31	6 35 42	8♂47'29	13♂43	16♂52	29♂14	23♂3	14°R38	5♂45	13♂37	16♂11	22♂4	9♂52	9♂52	27♂36	8♂23	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
S 1	21s41	7s55	5s12	24s15	0s57	7s16	2n10	20s35	0s 9	7n33	1n 2	20s 6	0s34	23s16	0s22	21s51
M 2	21 51	12 57	5 7	23 56	0 40	7 39	2 12	20 44	0 9	7 31	1 2	20 4	0 34	23 16	0 22	21 51
T 3	22 0	17 20	4 46	23 36	0 22	8 3	2 13	20 53	0 10	7 29	1 3	20 3	0 34	23 16	0 22	21 50
W 4	22 8	20 51	4 11	23 14	0 3	8 26	2 14	21 2	0 11	7 27	1 3	20 2	0 34	23 15	0 22	21 50
T 5	22 16	23 19	3 25	22 50	0n17	8 49	2 16	21 10	0 11	7 26	1 3	20 1	0 34	23 15	0 22	21 50
F 6	22 24	24 38	2 30	22 24	0 37	9 13	2 17	21 19	0 12	7 24	1 3	20 0	0 34	23 15	0 22	21 50
S 7	22 31	24 45	1 28	21 58	0 58	9 36	2 18	21 27	0 12	7 23	1 4	19 58	0 34	23 14	0 22	21 50
S 8	22 38	23 43	0 23	21 31	1 17	9 59	2 19	21 35	0 13	7 21	1 4	19 57	0 34	23 14	0 22	21 49
M 9	22 45	21 36	0n42	21 4	1 36	10 22	2 19	21 43	0 14	7 20	1 4	19 56	0 34	23 14	0 22	21 49
T 10	22 51	18 35	1 45	20 37	1 53	10 45	2 20	21 51	0 14	7 19	1 4	19 55	0 34	23 14	0 22	21 49
W11	22 56	14 49	2 44	20 13	2 8	11 8	2 21	21 58	0 15	7 17	1 5	19 53	0 34	23 13	0 22	21 49
T 12	23 1	10 29	3 36	19 51	2 22	11 31	2 21	22 5	0 15	7 16	1 5	19 52	0 34	23 13	0 22	21 49
F 13	23 6	5 43	4 19	19 31	2 32	11 53	2 21	22 13	0 16	7 15	1 5	19 51	0 34	23 13	0 22	21 48
S 14	23 10	0 40	4 52	19 15	2 41	12 15	2 22	22 19	0 17	7 14	1 5	19 49	0 34	23 12	0 22	21 48
S 15	23 14	4n32	5 11	19 3	2 47	12 37	2 22	22 26	0 17	7 13	1 6	19 48	0 34	23 12	0 22	21 48
M16	23 17	9 41	5 16	18 54	2 51	12 59	2 22	22 33	0 18	7 12	1 6	19 46	0 34	23 12	0 22	21 48
T 17	23 20	14 34	5 5	18 48	2 53	13 21	2 21	22 39	0 19	7 11	1 6	19 45	0 34	23 11	0 22	21 47
W18	23 22	18 53	4 37	18 47	2 54	13 42	2 21	22 45	0 19	7 11	1 6	19 44	0 34	23 11	0 22	21 47
T 19	23 24	22 17	3 51	18 48	2 52	14 3	2 21	22 51	0 20	7 10	1 7	19 42	0 34	23 11	0 22	21 47
F 20	23 25	24 23	2 49	18 52	2 50	14 24	2 20	22 56	0 20	7 9	1 7	19 41	0 34	23 10	0 22	21 47
S 21	23 26	24 48	1 35	18 59	2 46	14 45	2 20	23 2	0 21	7 9	1 7	19 39	0 34	23 10	0 22	21 46
S 22	23 26	23 26	0 12	19 7	2 41	15 5	2 19	23 7	0 22	7 8	1 8	19 38	0 35	23 10	0 22	21 46
M23	23 26	20 22	1s11	19 18	2 36	15 25	2 18	23 12	0 22	7 8	1 8	19 36	0 35	23 9	0 22	21 46
T 24	23 26	15 57	2 29	19 30	2 29	15 45	2 18	23 16	0 23	7 8	1 8	19 35	0 35	23 9	0 22	21 46
W25	23 25	10 37	3 36	19 43	2 23	16 5	2 17	23 21	0 23	7 8	1 8	19 33	0 35	23 9	0 22	21 45
T 26	23 23	4 49	4 27	19 57	2 15	16 24	2 16	23 25	0 24	7 7	1 9	19 32	0 35	23 8	0 22	21 45
F 27	23 21	1s 4	5 1	20 12	2 8	16 42	2 14	23 29	0 25	7 7	1 9	19 30	0 35	23 8	0 22	21 45
S 28	23 19	6 44	5 17	20 27	2 0	17 1	2 13	23 33	0 25	7 7	1 9	19 29	0 35	23 8	0 22	21 45
S 29	23 16	11 56	5 15	20 42	1 52	17 19	2 12	23 36	0 26	7 7	1 10	19 27	0 35	23 7	0 22	21 44
M30	23 13	16 28	4 57	20 58	1 43	17 36	2 10	23 40	0 27	7 8	1 10	19 26	0 35	23 7	0 22	21 44
T 31	23s 9	20s 9	4s24	21s13	1n35	17s53	2n 9	23s43	0s27	7n 8	1n10	19s24	0s35	23s 6	0s22	21s44

Julian Day Number = 2448591.5, Delta T = 58.24 sec  
Ecliptic obliquity = 23°26'27", Nutation = 0°00'16", out-of-bounds declination in red  
Ayanamsha: Fagan/Bradley = 24°37'38", Lahiri = 23°44'39"