



Astrodienst Ephemeris Tables for the year 1980

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 1980
geocentric

FEBRUARY 1980

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	8 41 28	11°16'27	10°11	18°48	19°14	13°R44	8°R12	26°R28	25°M12	21°A55	21°R46	29°R16	0°M15	22°M52	9°R13	F 1
S 2	8 45 25	12°17'20	22°19	20°34	20°27	13°M31	8°M6	26°M25	25°14	21°57	21°A45	29°R15	0°12	22°58	9°13	S 2
S 3	8 49 21	13°18'12	4°M18	22°21	21°39	13°17	7°59	26°22	25°15	21°59	21°45	29°D14	0°9	23°5	9°14	S 3
M 4	8 53 18	14°19'03	16°11	24°7	22°51	13°3	7°53	26°19	25°17	22°0	21°45	29°15	0°6	23°12	9°15	M 4
T 5	8 57 14	15°19'53	28°0	25°53	24°3	12°48	7°46	26°16	25°18	22°2	21°44	29°16	0°3	23°18	9°16	T 5
W 6	9 1 11	16°20'41	9°A48	27°39	25°15	12°33	7°39	26°13	25°19	22°3	21°44	29°18	29°M59	23°25	9°17	W 6
T 7	9 5 7	17°21'29	21°39	29°25	26°26	12°16	7°32	26°10	25°21	22°5	21°43	29°19	29°56	23°32	9°18	T 7
F 8	9 9 4	18°22'16	3°M38	1°H9	27°38	11°59	7°25	26°7	25°22	22°6	21°43	29°20	29°53	23°38	9°20	F 8
S 9	9 13 1	19°23'02	15°48	2°53	28°50	11°41	7°18	26°4	25°23	22°8	21°42	29°R20	29°50	23°45	9°21	S 9
S 10	9 16 57	20°23'47	28°15	4°35	0°Y1	11°23	7°11	26°1	25°24	22°9	21°42	29°20	29°47	23°52	9°22	S 10
M 11	9 20 54	21°24'31	11°A3	6°16	1°12	11°4	7°3	25°57	25°25	22°10	21°41	29°20	29°44	23°58	9°23	M 11
T 12	9 24 50	22°25'14	24°15	7°54	2°24	10°44	6°56	25°54	25°26	22°12	21°41	29°19	29°40	24°5	9°25	T 12
W 13	9 28 47	23°25'56	7°A58	9°30	3°35	10°24	6°49	25°50	25°27	22°13	21°40	29°18	29°37	24°12	9°26	W 13
T 14	9 32 43	24°26'37	22°0	11°2	4°46	10°4	6°41	25°47	25°28	22°14	21°39	29°18	29°34	24°18	9°28	T 14
F 15	9 36 40	25°27'17	6°M30	12°31	5°57	9°42	6°33	25°43	25°29	22°16	21°39	29°17	29°31	24°25	9°29	F 15
S 16	9 40 36	26°27'55	21°19	13°55	7°8	9°21	6°26	25°39	25°29	22°17	21°38	29°17	29°28	24°32	9°31	S 16
S 17	9 44 33	27°28'31	6°H20	15°14	8°18	8°59	6°18	25°35	25°30	22°18	21°37	29°D17	29°24	24°38	9°32	S 17
M 18	9 48 30	28°29'06	21°25	16°28	9°29	8°36	6°10	25°31	25°31	22°19	21°36	29°17	29°21	24°45	9°34	M 18
T 19	9 52 26	29°29'40	6°Y24	17°34	10°39	8°13	6°3	25°27	25°31	22°20	21°35	29°R17	29°18	24°52	9°36	T 19
W 20	9 56 23	0°H30'11	21°11	18°34	11°50	7°50	5°55	25°23	25°32	22°22	21°35	29°17	29°15	24°58	9°38	W 20
T 21	10 0 19	1°30'41	5°A38	19°26	13°0	7°27	5°47	25°19	25°32	22°23	21°34	29°17	29°12	25°5	9°40	T 21
F 22	10 4 16	2°31'09	19°43	20°10	14°10	7°4	5°39	25°15	25°33	22°24	21°33	29°17	29°9	25°12	9°42	F 22
S 23	10 8 12	3°31'35	3°II24	20°44	15°20	6°40	5°31	25°11	25°33	22°25	21°32	29°D16	29°5	25°18	9°44	S 23
S 24	10 12 9	4°32'00	16°43	21°9	16°30	6°16	5°23	25°7	25°33	22°26	21°31	29°17	29°2	25°25	9°46	S 24
M 25	10 16 5	5°32'22	29°42	21°25	17°39	5°52	5°15	25°2	25°34	22°27	21°30	29°17	28°59	25°32	9°48	M 25
T 26	10 20 2	6°32'42	12°A22	21°R30	18°49	5°29	5°7	24°58	25°34	22°28	21°29	29°18	28°56	25°38	9°50	T 26
W 27	10 23 58	7°33'01	24°48	21°26	19°58	5°5	5°0	24°54	25°34	22°29	21°28	29°19	28°53	25°45	9°52	W 27
T 28	10 27 55	8°33'17	7°R1	21°12	21°7	4°41	4°52	24°49	25°34	22°29	21°27	29°19	28°49	25°52	9°54	T 28
F 29	10 31 52	9°H33'32	19°R6	20°H49	22°Y16	4°M17	4°M44	24°M45	25°R34	22°A30	21°A26	29°R20	28°R46	25°M58	9°A57	F 29

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	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	17s24	16n 2	1s44	16s58	1s53	5s14	1s 3	10n11	4n 6	9n39	1n15	3n31	2n18	18s48	0n17	F 1
S 2	17 7	13 28	0 38	16 21	1 49	4 43	1 1	10 17	4 8	9 42	1 15	3 32	2 18	18 48	0 17	S 2
S 3	16 50	10 22	0n28	15 42	1 44	4 12	0 58	10 24	4 9	9 45	1 16	3 34	2 18	18 48	0 17	S 3
M 4	16 32	6 52	1 33	15 2	1 39	3 41	0 55	10 31	4 11	9 47	1 16	3 35	2 19	18 49	0 17	M 4
T 5	16 14	3 8	2 33	14 21	1 33	3 10	0 52	10 38	4 12	9 50	1 16	3 36	2 19	18 49	0 17	T 5
W 6	15 56	0s43	3 27	13 38	1 26	2 38	0 49	10 45	4 13	9 53	1 16	3 38	2 19	18 49	0 17	W 6
T 7	15 38	4 33	4 12	12 55	1 19	2 7	0 46	10 53	4 15	9 55	1 16	3 39	2 19	18 49	0 17	T 7
F 8	15 19	8 14	4 46	12 11	1 11	1 36	0 43	11 0	4 16	9 58	1 17	3 41	2 20	18 50	0 17	F 8
S 9	15 0	11 38	5 9	11 25	1 3	1 4	0 39	11 8	4 17	10 1	1 17	3 42	2 20	18 50	0 17	S 9
S 10	14 41	14 36	5 18	10 39	0 53	0 33	0 36	11 16	4 18	10 4	1 17	3 44	2 20	18 50	0 17	S 10
M 11	14 22	16 58	5 11	9 53	0 43	0 1	0 33	11 24	4 19	10 7	1 17	3 45	2 20	18 51	0 17	M 11
T 12	14 2	18 31	4 48	9 6	0 32	0n30	0 29	11 33	4 20	10 10	1 17	3 47	2 20	18 51	0 17	T 12
W 13	13 43	19 4	4 9	8 20	0 21	1 2	0 26	11 41	4 20	10 13	1 17	3 48	2 21	18 51	0 17	W 13
T 14	13 22	18 28	3 13	7 33	0 8	1 33	0 22	11 49	4 21	10 15	1 17	3 50	2 21	18 51	0 17	T 14
F 15	13 2	16 39	2 3	6 48	0n 4	2 5	0 18	11 58	4 22	10 18	1 18	3 52	2 21	18 51	0 17	F 15
S 16	12 42	13 42	0 44	6 3	0 18	2 36	0 15	12 7	4 22	10 21	1 18	3 53	2 21	18 52	0 17	S 16
S 17	12 21	9 48	0s39	5 19	0 32	3 8	0 11	12 15	4 23	10 24	1 18	3 55	2 21	18 52	0 17	S 17
M 18	12 0	5 15	2 0	4 38	0 47	3 39	0 7	12 24	4 23	10 27	1 18	3 57	2 22	18 52	0 17	M 18
T 19	11 39	0 24	3 12	3 58	1 2	4 10	0 3	12 33	4 23	10 30	1 18	3 59	2 22	18 52	0 17	T 19
W 20	11 18	4n23	4 11	3 21	1 17	4 41	0n 1	12 42	4 23	10 33	1 18	4 0	2 22	18 52	0 17	W 20
T 21	10 56	8 49	4 51	2 46	1 32	5 12	0 5	12 51	4 23	10 36	1 18	4 2	2 22	18 52	0 17	T 21
F 22	10 35	12 38	5 14	2 15	1 48	5 43	0 9	12 59	4 23	10 39	1 18	4 4	2 22	18 52	0 17	F 22
S 23	10 13	15 39	5 17	1 47	2 3	6 14	0 13	13 8	4 23	10 42	1 18	4 6	2 22	18 52	0 17	S 23
S 24	9 51	17 45	5 3	1 24	2 18	6 45	0 17	13 17	4 23	10 45	1 19	4 8	2 23	18 52	0 17	S 24
M 25	9 29	18 52	4 34	1 5	2 42	7 15	0 21	13 25	4 22	10 48	1 19	4 9	2 23	18 52	0 17	M 25
T 26	9 7	19 0	3 53	0 50	2 35	7 46	0 25	13 33	4 22	10 51	1 19	4 11	2 23	18 53	0 17	T 26
W 27	8 44	18 13	3 0	0 40	2 58	8 16	0 30	13 42	4 21	10 54	1 19	4 13	2 23	18 53	0 17	W 27
T 28	8 22	16 34	2 1	0 35	3 9	8 46	0 34	13 50	4 20	10 57	1 19	4 15	2 23	18 53	0 17	T 28
F 29	7s59	14n12	0s57	0s35	3n19	9n16	0n38	13n58	4n19	11n 0	1n19	4n17	2n23	18s53	0n17	F 29

Julian Day Number = 2444270.5, Delta T = 50.61 sec
Ecliptic obliquity = 23°26'23, Nutation = - 0°00'07, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 24°27'44, Lahiri = 23°34'44

ASTRODIENST EPHEMERIS for the year 1980

geocentric

MARCH 1980

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 35 48	10♈33'44	1♉ 3	20°R17	23°V25	3°R54	4°R36	24°R40	25°R34	22♊31	21°R24	29°R20	28♌43	26♍ 5	9♎59	S 1
S 2	10 39 45	11°33'55	12°55	19♈37	24°34	3♉31	4♉28	24♉36	25♊34	22°32	21♊23	29♌20	28°40	26°12	10° 1	S 2
M 3	10 43 41	12°34'04	24°45	18°51	25°42	3° 8	4°21	24°31	25°34	22°33	21°22	29°19	28°37	26°18	10° 4	M 3
T 4	10 47 38	13°34'11	6♈34	17°59	26°51	2°45	4°13	24°26	25°34	22°33	21°21	29°17	28°34	26°25	10° 6	T 4
W 5	10 51 34	14°34'17	18°24	17° 2	27°59	2°22	4° 5	24°22	25°34	22°34	21°20	29°15	28°30	26°32	10° 9	W 5
T 6	10 55 31	15°34'21	0♉19	16° 3	29° 7	2° 0	3°58	24°17	25°33	22°35	21°18	29°12	28°27	26°38	10°11	T 6
F 7	10 59 27	16°34'23	12°20	15° 2	0♊14	1°39	3°50	24°12	25°33	22°35	21°17	29° 9	28°24	26°45	10°14	F 7
S 8	11 3 24	17°34'23	24°31	14° 1	1°22	1°17	3°42	24° 8	25°33	22°36	21°16	29° 7	28°21	26°52	10°16	S 8
S 9	11 7 21	18°34'22	6♊57	13° 2	2°29	0°57	3°35	24° 3	25°32	22°36	21°14	29° 6	28°18	26°58	10°19	S 9
M10	11 11 17	19°34'20	19°40	12° 5	3°36	0°36	3°28	23°58	25°32	22°37	21°13	29°D 5	28°15	27° 5	10°22	M10
T 11	11 15 14	20°34'15	2♊44	11°11	4°43	0°17	3°20	23°54	25°31	22°37	21°12	29° 6	28°11	27°12	10°25	T 11
W12	11 19 10	21°34'10	16°13	10°23	5°50	29♌57	3°13	23°49	25°31	22°38	21°10	29° 7	28° 8	27°18	10°27	W12
T 13	11 23 7	22°34'02	0♋ 9	9°39	6°57	29°39	3° 6	23°44	25°30	22°38	21° 9	29° 9	28° 5	27°25	10°30	T 13
F 14	11 27 3	23°33'53	14°31	9° 1	8° 3	29°21	2°59	23°39	25°29	22°39	21° 7	29°10	28° 2	27°32	10°33	F 14
S 15	11 31 0	24°33'42	29°16	8°29	9° 9	29° 4	2°52	23°35	25°28	22°39	21° 6	29°R10	27°59	27°38	10°36	S 15
S 16	11 34 56	25°33'29	14♈20	8° 4	10°15	28°47	2°45	23°30	25°28	22°39	21° 5	29°10	27°55	27°45	10°39	S 16
M17	11 38 53	26°33'14	29°34	7°45	11°21	28°31	2°39	23°25	25°27	22°40	21° 3	29° 8	27°52	27°52	10°42	M17
T 18	11 42 50	27°32'57	14♉48	7°32	12°26	28°16	2°32	23°20	25°26	22°40	21° 2	29° 4	27°49	27°58	10°45	T 18
W19	11 46 46	28°32'38	29°52	7°25	13°31	28° 1	2°26	23°16	25°25	22°40	21° 0	29° 0	27°46	28° 5	10°48	W19
T 20	11 50 43	29°32'16	14♊37	7°D25	14°36	27°47	2°19	23°11	25°24	22°40	20°58	28°56	27°43	28°11	10°51	T 20
F 21	11 54 39	0♋31'53	28°57	7°30	15°40	27°34	2°13	23° 6	25°23	22°40	20°57	28°52	27°40	28°18	10°54	F 21
S 22	11 58 36	1°31'27	12♌49	7°41	16°45	27°22	2° 7	23° 2	25°22	22°40	20°55	28°49	27°36	28°25	10°58	S 22
S 23	12 2 32	2°30'59	26°13	7°58	17°49	27°11	2° 1	22°57	25°21	22°41	20°54	28°48	27°33	28°31	11° 1	S 23
M24	12 6 29	3°30'29	9♌11	8°19	18°52	27° 0	1°55	22°52	25°19	22°41	20°52	28°D48	27°30	28°38	11° 4	M24
T 25	12 10 25	4°29'57	21°47	8°45	19°56	26°50	1°49	22°48	25°18	22°R41	20°51	28°49	27°27	28°45	11° 7	T 25
W26	12 14 22	5°29'22	4♌ 5	9°16	20°59	26°41	1°44	22°43	25°17	22°41	20°49	28°50	27°24	28°51	11°11	W26
T 27	12 18 19	6°28'44	16°10	9°51	22° 2	26°33	1°38	22°39	25°16	22°40	20°47	28°52	27°21	28°58	11°14	T 27
F 28	12 22 15	7°28'05	28° 5	10°30	23° 4	26°25	1°33	22°34	25°14	22°40	20°46	28°R53	27°17	29° 5	11°17	F 28
S 29	12 26 12	8°27'23	9♍56	11°13	24° 6	26°18	1°28	22°30	25°13	22°40	20°44	28°52	27°14	29°11	11°21	S 29
S 30	12 30 8	9°26'39	21°44	11°59	25° 8	26°13	1°23	22°25	25°11	22°40	20°43	28°49	27°11	29°18	11°24	S 30
M31	12 34 5	10°V25'53	3♌32	12♈49	26° 9	26° 7	1°18	22°21	25°10	22♊40	20♌41	28♌45	27♌ 8	29♍25	11♎28	M31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	7s36	11n15	0n10	0s40	3n28	9n45	0n42	14n 5	4n19	11n 3	1n19	4n19	2n23	18s53	0n17	21s52	1n22	7n58	17n34	11n42	11n55	3n44	13n17	1s36										
S 2	7 14	7 51	1 15	0 50	3 34	10 15	0 47	14 13	4 18	11 6	1 19	4 21	2 24	18 53	0 17	21 52	1 22	7 59	17 35	11 42	11 56	3 42	13 18	1 36										
M 3	6 51	4 10	2 16	1 4	3 39	10 44	0 51	14 20	4 16	11 9	1 19	4 23	2 24	18 53	0 17	21 52	1 22	7 59	17 35	11 43	11 57	3 40	13 19	1 36										
T 4	6 28	0 20	3 12	1 22	3 41	11 13	0 56	14 28	4 15	11 12	1 19	4 25	2 24	18 52	0 17	21 52	1 22	8 0	17 35	11 43	11 59	3 38	13 19	1 36										
W 5	6 4	3s31	4 0	1 43	3 41	11 41	1 0	14 34	4 14	11 14	1 19	4 26	2 24	18 52	0 17	21 52	1 22	8 1	17 36	11 44	12 0	3 36	13 20	1 36										
T 6	5 41	7 15	4 37	2 8	3 40	12 10	1 5	14 41	4 12	11 17	1 19	4 28	2 24	18 52	0 17	21 52	1 22	8 2	17 36	11 45	12 1	3 34	13 21	1 36										
F 7	5 18	10 44	5 2	2 35	3 36	12 38	1 9	14 48	4 11	11 20	1 19	4 30	2 24	18 52	0 17	21 52	1 22	8 3	17 37	11 46	12 2	3 32	13 22	1 36										
S 8	4 55	13 48	5 15	3 4	3 30	13 6	1 14	14 54	4 9	11 23	1 19	4 32	2 24	18 52	0 17	21 52	1 22	8 3	17 37	11 47	12 3	3 30	13 23	1 36										
S 9	4 31	16 20	5 13	3 33	3 22	13 34	1 18	15 0	4 8	11 25	1 19	4 34	2 24	18 52	0 17	21 52	1 22	8 4	17 37	11 47	12 4	3 28	13 23	1 36										
M10	4 8	18 7	4 56	4 4	3 13	14 1	1 23	15 5	4 6	11 28	1 19	4 36	2 24	18 52	0 17	21 52	1 22	8 5	17 38	11 47	12 5	3 27	13 24	1 36										
T 11	3 44	19 2	4 23	4 34	3 2	14 28	1 27	15 11	4 4	11 31	1 19	4 38	2 24	18 52	0 17	21 52	1 22	8 6	17 38	11 47	12 6	3 25	13 25	1 36										
W12	3 21	18 54	3 35	5 3	2 50	14 55	1 32	15 16	4 2	11 33	1 19	4 40	2 24	18 52	0 17	21 52	1 22	8 7	17 38	11 47	12 7	3 23	13 26	1 36										
T 13	2 57	17 37	2 33	5 32	2 37	15 21	1 36	15 21	4 0	11 36	1 19	4 42	2 25	18 51	0 17	21 52	1 22	8 7	17 38	11 46	12 8	3 21	13 27	1 36										
F 14	2 33	15 12	1 20	5 58	2 23	15 47	1 41	15 25	3 58	11 38	1 19	4 44	2 25	18 51	0 17	21 52	1 22	8 8	17 39	11 46	12 10	3 19	13 28	1 36										
S 15	2 10	11 44	0s 1	6 24	2 9	16 13	1 45	15 29	3 56	11 41	1 19	4 46	2 25	18 51	0 17	21 52	1 23	8 9	17 39	11 46	12 11	3 17	13 29	1 36										
S 16	1 46	7 26	1 23	6 47	1 54	16 38	1 50	15 33	3 54	11 43	1 19	4 48	2 25	18 51	0 17	21 52	1 23	8 10	17 39	11 46	12 12	3 15	13 30	1 36										
M17	1 22	2 37	2 39	7 8	1 39	17 3	1 55	15 37	3 52	11 46	1 19	4 50	2 25	18 51	0 17	21 52	1 23	8 10	17 40	11 47	12 13	3 13	13 31	1 36										
T 18	0 58	2n22	3 45	7 26	1 24	17 27	1 59	15 40	3 50	11 48	1 19	4 52	2 25	18 51	0 17	21 52	1 23	8 11	17 40	11 48	12 14	3 11	13 31	1 36										
W19	0 35	7 9	4 34	7 42	1 10	17 52	2 4	15 43	3 47	11 50	1 19	4 54	2 25	18 50	0 17	21 52	1 23	8 12	17 40	11 49	12 15	3 9	13 32	1 36										
T 20	0 11	11 23	5 4	7 56	0 55	18 15	2 8	15 46	3 45	11 53	1 19	4 55	2 25	18 50	0 17	21 52	1 23	8 13	17 40	11 51	12 16	3 7	13 33	1 36										
F 21	0n13	14 50	5 13	8 8	0 41	18 39	2 13	15 48	3 43	11 55	1 19	4 57	2 25	18 50	0 17	21 52	1 23	8 14	17 41	11 52	12 17	3 5	13 34	1 36										
S 22	0 36	17 19	5 4	8 17	0 26	19 2	2 17	15 50	3 40	11 57	1 19	4 59	2 25	18 50	0 17	21 52	1 23	8 14	17 41	11 53	12 18	3 3	13 35	1 36										
S 23	1 0	18 45	4 38	8 23	0 13	19 24	2 21	15 52	3 38	11 59	1 19	5 1	2 25	18 49	0 17	21 52	1 23	8 15	17 41	11 54	12 19	3 1	13 36	1 36										
M24	1 24	19 9	3 59	8 27	0s 0	19 46	2 26	15 53	3 36	12 1	1 19	5 3	2 25	18 49	0 17	21 51	1 23	8 16	17 41	11 54	12 20	2 59	13 37	1 36										
T 25	1 47	18 34	3 9	8 30	0 13	20 8	2 30	15 54	3 33	12 3	1 19	5 5	2 25	18 49	0 17	21 51	1 23	8 17	17 41	11 53	12 22	2 57	13 38	1 36										
W26	2 11	17 6	2 11	8 29	0 25	20 29	2 35	15 55	3 31	12 5	1 18	5 6	2 25	18 48	0 17	21 51	1 23	8 17	17 42	11 53	12 23	2 55	13 39	1 36										
T 27	2 34	14 54	1 9	8 27	0 37	20 50	2 39	15 56	3 28	12 7	1 18	5 8	2 25	18 48	0 17	21 51	1 23	8 18	17 42	11 52	12 24	2 53	13 40	1 36										
F 28	2 58	12 4	0 4	8 23	0 48	21 10	2 43	15 56	3 26	12 9	1 18	5 10	2 25	18 48	0 17	21 51	1 23	8 19	17 42	11 52	12 25	2 51	13 41	1 36										
S 29	3 21	8 46	1n 0	8 16	0 59	21 30	2 48	15 56	3 23	12 10	1 18	5 12	2 25	18 47	0 17	21 51	1 23	8 19	17 42	11 52	12 26	2 49	13 42	1 37										
S 30	3 45	5 8	2 1	8 8	1 9	21 49	2 52	15 56	3 21	12 12	1 18	5 14	2 25	18 47	0 17	21 51	1 23	8 20	17 42	11 53	12 27	2 48	13 43	1 37										
M31	4n 8	1n18	2n57	7s58	1s19	22n 8	2n56	15n55	3n18	12n14	1n18	5n15	2n25	18s47	0n17	21s51	1n23	8n21	17n42	11n55	12n28	2n46	13n44	1s37										

ASTRODIENST EPHEMERIS for the year 1980

geocentric

MAY 1980

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 36 18	10°46'13	18°11'29	27°12'12	23°11'26	29°11'11	0°11'16	20°R35	24°R 6	22°R19	19°R50	26°R11	25°R29	2°52	13°R24	T 1
F 2	14 40 14	11°44'25	0°17'51	29° 7	24° 6	29°26	0°17	20°R33	24°R 4	22°R18	19°R48	25°R58	25°26	2°58	13°28	F 2
S 3	14 44 11	12°42'35	13°24	1° 4	24°45	29°42	0°19	20°31	24° 2	22°17	19°47	25°46	25°23	3° 5	13°32	S 3
S 4	14 48 7	13°40'43	26° 8	3° 2	25°23	29°58	0°20	20°29	23°59	22°15	19°45	25°37	25°20	3°12	13°36	S 4
M 5	14 52 4	14°38'50	9° 3	5° 2	26° 0	0°11'15	0°21	20°27	23°57	22°14	19°44	25°30	25°17	3°18	13°40	M 5
T 6	14 56 1	15°36'56	22°11	7° 4	26°35	0°32	0°23	20°26	23°54	22°13	19°42	25°26	25°13	3°25	13°44	T 6
W 7	14 59 57	16°35'00	5°35	9° 7	27° 9	0°50	0°25	20°24	23°52	22°12	19°41	25°24	25°10	3°32	13°48	W 7
T 8	15 3 54	17°33'03	19°14	11°12	27°42	1° 7	0°27	20°22	23°49	22°11	19°39	25°24	25° 7	3°38	13°52	T 8
F 9	15 7 50	18°31'04	3°12	13°18	28°13	1°26	0°29	20°21	23°47	22° 9	19°38	25°24	25° 4	3°45	13°55	F 9
S 10	15 11 47	19°29'04	17°27	15°25	28°43	1°45	0°31	20°20	23°44	22° 8	19°36	25°23	25° 1	3°52	13°59	S 10
S 11	15 15 43	20°27'03	1°59	17°34	29°11	2° 4	0°34	20°18	23°42	22° 7	19°35	25°19	24°57	3°58	14° 3	S 11
M12	15 19 40	21°25'00	16°45	19°43	29°38	2°23	0°37	20°17	23°39	22° 5	19°33	25°13	24°54	4° 5	14° 7	M12
T 13	15 23 36	22°22'57	1°37	21°54	0°53	2°43	0°40	20°16	23°37	22° 4	19°32	25° 5	24°51	4°12	14°11	T 13
W14	15 27 33	23°20'51	16°27	24° 4	0°27	3° 3	0°43	20°15	23°34	22° 3	19°31	24°54	24°48	4°18	14°15	W14
T 15	15 31 30	24°18'45	1°11	8	26°16	0°48	3°24	20°15	23°32	22° 1	19°29	24°43	24°45	4°25	14°19	T 15
F 16	15 35 26	25°16'36	15°31	28°27	1° 8	3°45	0°49	20°14	23°29	22° 0	19°28	24°31	24°42	4°32	14°23	F 16
S 17	15 39 23	26°14'27	29°30	0°11'38	1°26	4° 6	0°53	20°13	23°27	21°59	19°27	24°22	24°38	4°38	14°27	S 17
S 18	15 43 19	27°12'16	13°3	2°48	1°42	4°28	0°57	20°13	23°24	21°57	19°26	24°15	24°35	4°45	14°31	S 18
M19	15 47 16	28°10'03	26° 8	4°57	1°56	4°50	1° 1	20°12	23°22	21°56	19°24	24°10	24°32	4°52	14°34	M19
T 20	15 51 12	29° 7'48	8°14	7° 6	2° 8	5°13	1° 5	20°12	23°19	21°54	19°23	24° 8	24°29	4°58	14°38	T 20
W21	15 55 9	0°11'53	21° 9	9°13	2°18	5°35	1° 9	20°12	23°17	21°53	19°22	24° 8	24°26	5° 5	14°42	W21
T 22	15 59 6	1° 3'14	3°14	11°18	2°26	5°58	1°13	20°D12	23°14	21°51	19°21	24° 8	24°23	5°12	14°46	T 22
F 23	16 3 2	2° 0'54	15° 8	13°22	2°31	6°22	1°18	20°12	23°12	21°50	19°20	24° 7	24°19	5°18	14°50	F 23
S 24	16 6 59	2°58'33	26°57	15°24	2°34	6°45	1°23	20°12	23° 9	21°48	19°19	24° 5	24°16	5°25	14°53	S 24
S 25	16 10 55	3°56'11	8°14	17°23	2°R35	7° 9	1°27	20°12	23° 7	21°47	19°18	24° 1	24°13	5°32	14°57	S 25
M26	16 14 52	4°53'47	20°41	19°20	2°34	7°33	1°32	20°12	23° 4	21°45	19°17	23°54	24°10	5°38	15° 1	M26
T 27	16 18 48	5°51'22	2°14	21°15	2°30	7°58	1°38	20°13	23° 2	21°44	19°15	23°44	24° 7	5°45	15° 5	T 27
W28	16 22 45	6°48'55	14°56	23° 7	2°23	8°23	1°43	20°13	22°59	21°42	19°14	23°33	24° 3	5°52	15° 8	W28
T 29	16 26 41	7°46'27	27°21	24°56	2°14	8°48	1°48	20°14	22°57	21°41	19°14	23°20	24° 0	5°59	15°12	T 29
F 30	16 30 38	8°43'58	9°15	26°43	2° 3	9°13	1°54	20°15	22°55	21°39	19°13	23° 8	23°57	6° 5	15°16	F 30
S 31	16 34 34	9°11'28	22°14	28°11	1°54	9°13	2°00	20°15	22°52	21°38	19°12	22°57	23°54	6°12	15°20	S 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	15n 3	12s33	4n58	8n48	1s48	27n34	4n18	13n43	2n 6	12n31	1n14	5n54	2n22	18s31	0n17	21s49
F 2	15 21	15 26	5 0	9 36	1 40	27 37	4 18	13 36	2 4	12 31	1 14	5 55	2 21	18 31	0 17	21 49
S 3	15 39	17 39	4 47	10 24	1 32	27 38	4 18	13 29	2 2	12 30	1 13	5 55	2 21	18 30	0 17	21 49
S 4	15 57	19 3	4 20	11 12	1 24	27 40	4 18	13 21	2 0	12 30	1 13	5 56	2 21	18 29	0 17	21 49
M 5	16 14	19 29	3 39	12 1	1 16	27 40	4 18	13 13	1 58	12 29	1 13	5 56	2 21	18 29	0 17	21 49
T 6	16 31	18 53	2 46	12 49	1 7	27 41	4 17	13 5	1 56	12 28	1 13	5 57	2 21	18 28	0 17	21 49
W 7	16 48	17 13	1 43	13 38	0 57	27 41	4 16	12 57	1 54	12 28	1 13	5 58	2 21	18 28	0 17	21 48
T 8	17 4	14 32	0 33	14 26	0 48	27 40	4 15	12 49	1 52	12 27	1 13	5 58	2 20	18 27	0 17	21 48
F 9	17 20	10 58	0s41	15 14	0 38	27 39	4 14	12 41	1 50	12 26	1 12	5 58	2 20	18 26	0 17	21 48
S 10	17 36	6 42	1 54	16 1	0 28	27 38	4 12	12 32	1 48	12 25	1 12	5 59	2 20	18 26	0 17	21 48
S 11	17 52	1 58	3 1	16 48	0 17	27 36	4 10	12 24	1 46	12 24	1 12	5 59	2 20	18 25	0 17	21 48
M12	18 7	2n57	3 56	17 34	0 7	27 34	4 8	12 15	1 45	12 23	1 12	5 59	2 20	18 25	0 17	21 48
T 13	18 22	7 43	4 36	18 18	0n 4	27 31	4 5	12 6	1 43	12 21	1 12	6 0	2 20	18 24	0 17	21 48
W14	18 37	12 0	4 57	19 1	0 14	27 28	4 2	11 57	1 41	12 20	1 12	6 0	2 19	18 23	0 17	21 48
T 15	18 51	15 31	4 59	19 43	0 25	27 25	3 59	11 48	1 39	12 19	1 11	6 0	2 19	18 23	0 17	21 48
F 16	19 5	18 0	4 41	20 23	0 35	27 21	3 55	11 39	1 37	12 18	1 11	6 0	2 19	18 22	0 17	21 48
S 17	19 19	19 20	4 7	21 1	0 45	27 17	3 51	11 29	1 36	12 16	1 11	6 0	2 19	18 22	0 17	21 47
S 18	19 32	19 30	3 19	21 37	0 55	27 12	3 46	11 20	1 34	12 15	1 11	6 0	2 19	18 21	0 17	21 47
M19	19 45	18 35	2 22	22 11	1 4	27 7	3 42	11 10	1 32	12 13	1 11	6 0	2 18	18 20	0 17	21 47
T 20	19 58	16 46	1 20	22 42	1 13	27 2	3 36	11 0	1 31	12 12	1 11	6 0	2 18	18 20	0 17	21 47
W21	20 10	14 12	0 16	23 11	1 22	26 56	3 31	10 50	1 29	12 10	1 10	6 0	2 18	18 19	0 17	21 47
T 22	20 22	11 4	0n48	23 37	1 30	26 50	3 25	10 40	1 27	12 8	1 10	6 0	2 18	18 18	0 17	21 47
F 23	20 34	7 32	1 49	24 1	1 37	26 43	3 18	10 30	1 26	12 6	1 10	6 0	2 18	18 18	0 17	21 47
S 24	20 45	3 44	2 45	24 22	1 44	26 36	3 11	10 20	1 24	12 5	1 10	5 59	2 17	18 17	0 17	21 47
S 25	20 56	0s13	3 33	24 40	1 50	26 29	3 4	10 10	1 23	12 3	1 10	5 59	2 17	18 17	0 17	21 47
M26	21 7	4 10	4 13	24 55	1 55	26 21	2 56	9 59	1 21	12 1	1 10	5 59	2 17	18 16	0 17	21 47
T 27	21 17	8 0	4 41	25 8	2 0	26 13	2 48	9 49	1 19	11 59	1 10	5 59	2 17	18 15	0 17	21 46
W28	21 27	11 34	4 58	25 19	2 3	26 4	2 39	9 38	1 18	11 57	1 9	5 58	2 17	18 15	0 17	21 46
T 29	21 36	14 41	5 0	25 27	2 6	25 55	2 30	9 27	1 16	11 55	1 9	5 58	2 17	18 14	0 17	21 46
F 30	21 46	17 12	4 48	25 32	2 8	25 45	2 20	9 16	1 15	11 52	1 9	5 57	2 16	18 14	0 17	21 46
S 31	21n54	18s53	4n22	25n36	2n10	25n35	2n10	9n 5	1n13	11n50	1n 9	5n57	2n16	18s13	0n17	21s46

Julian Day Number = 2444360.5, Delta T = 50.83 sec
 Ecliptic obliquity = 23°26'23, Nutation = - 0°00'11, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 24°27'56, Lahiri = 23°34'56

ASTRODIENST EPHEMERIS for the year 1980

geocentric

JUNE 1980

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 38 31	10 ^{II} 38°57	5 ^{III} 52	0 ^{IV} 8	1°R33	10 ^{III} 5	2 ^{III} 6	20 ^{III} 16	22°R50	21°R36	19°R11	22°R47	23 ^{II} 51	6 ^{II} 19	15 ^{II} 23	S 1
M 2	16 42 28	11°36'25	19° 7	1°46	1 ^{III} 15	10°31	2°12	20°17	22 ^{III} 47	21° ^{III} 34	19° ^{II} 10	22 ^{II} 41	23°48	6°25	15°27	M 2
T 3	16 46 24	12°33'53	2 ^{III} 32	3°22	0°54	10°57	2°18	20°18	22°45	21°33	19° 9	22°37	23°44	6°32	15°30	T 3
W 4	16 50 21	13°31'19	16° 8	4°54	0°31	11°24	2°24	20°20	22°43	21°31	19° 8	22°35	23°41	6°39	15°34	W 4
T 5	16 54 17	14°28'45	29°54	6°24	0° 6	11°51	2°31	20°21	22°41	21°30	19° 7	22°D35	23°38	6°45	15°38	T 5
F 6	16 58 14	15°26'10	13 ^{III} 52	7°50	29 ^{II} 39	12°18	2°37	20°22	22°38	21°28	19° 7	22°R36	23°35	6°52	15°41	F 6
S 7	17 2 10	16°23'34	27°59	9°14	29°10	12°45	2°44	20°24	22°36	21°26	19° 6	22°35	23°32	6°59	15°45	S 7
S 8	17 6 7	17°20'58	12 ^{III} 17	10°35	28°40	13°12	2°51	20°26	22°34	21°25	19° 5	22°33	23°29	7° 5	15°48	S 8
M 9	17 10 3	18°18'22	26°42	11°52	28° 7	13°40	2°58	20°27	22°32	21°23	19° 5	22°28	23°25	7°12	15°52	M 9
T 10	17 14 0	19°15'45	11 ^{III} 9	13° 7	27°34	14° 8	3° 5	20°29	22°29	21°22	19° 4	22°21	23°22	7°19	15°55	T 10
W11	17 17 57	20°13'07	25°35	14°18	26°59	14°36	3°12	20°31	22°27	21°20	19° 3	22°13	23°19	7°25	15°59	W11
T 12	17 21 53	21°10'29	9 ^{II} 53	15°26	26°23	15° 5	3°20	20°33	22°25	21°18	19° 3	22° 3	23°16	7°32	16° 2	T 12
F 13	17 25 50	22° 7'50	23°57	16°31	25°47	15°33	3°27	20°35	22°23	21°17	19° 2	21°54	23°13	7°39	16° 5	F 13
S 14	17 29 46	23° 5'11	17°32	17°32	25° 9	16° 2	3°35	20°37	22°21	21°15	19° 2	21°46	23° 9	7°45	16° 9	S 14
S 15	17 33 43	24° 2'30	21° 5	18°30	24°32	16°31	3°43	20°40	22°19	21°13	19° 1	21°40	23° 6	7°52	16°12	S 15
M16	17 37 39	24°59'49	4 ^{II} 6	19°24	23°54	17° 1	3°51	20°42	22°17	21°12	19° 1	21°36	23° 3	7°59	16°15	M16
T 17	17 41 36	25°57'07	16°45	20°15	23°17	17°30	3°59	20°45	22°15	21°10	19° 0	21°D35	23° 0	8° 6	16°18	T 17
W18	17 45 33	26°54'25	29° 6	21° 2	22°40	18° 0	4° 7	20°47	22°13	21° 9	19° 0	21°35	22°57	8°12	16°22	W18
T 19	17 49 29	27°51'41	11 ^{III} 11	21°46	22° 4	18°29	4°15	20°50	22°11	21° 7	19° 0	21°36	22°54	8°19	16°25	T 19
F 20	17 53 26	28°48'57	23° 7	22°25	21°28	19° 0	4°23	20°53	22° 9	21° 5	18°59	21°R37	22°50	8°26	16°28	F 20
S 21	17 57 22	29°46'12	4 ^{II} 58	23° 0	20°54	19°30	4°32	20°56	22° 8	21° 4	18°59	21°36	22°47	8°32	16°31	S 21
S 22	18 1 19	0 ^{III} 43'27	16°50	23°32	20°20	20° 0	4°41	20°59	22° 6	21° 2	18°59	21°35	22°44	8°39	16°34	S 22
M23	18 5 15	1°40'40	28°47	23°59	19°49	20°31	4°49	21° 2	22° 4	21° 1	18°59	21°31	22°41	8°46	16°37	M23
T 24	18 9 12	2°37'54	10 ^{III} 53	24°21	19°19	21° 1	4°58	21° 5	22° 2	20°59	18°58	21°26	22°38	8°52	16°40	T 24
W25	18 13 8	3°35'06	23°12	24°39	18°50	21°32	5° 7	21° 8	22° 1	20°57	18°58	21°19	22°35	8°59	16°43	W25
T 26	18 17 5	4°32'19	5 ^{III} 47	24°53	18°24	22° 3	5°16	21°11	21°59	20°56	18°58	21°11	22°31	9° 6	16°46	T 26
F 27	18 21 2	5°29'30	18°39	25° 2	18° 0	22°35	5°25	21°15	21°58	20°54	18°58	21° 3	22°28	9°12	16°49	F 27
S 28	18 24 58	6°26'42	1 ^{III} 47	25°R 7	17°37	23° 6	5°34	21°18	21°56	20°53	18°58	20°56	22°25	9°19	16°52	S 28
S 29	18 28 55	7°23'53	15°11	25° 6	17°17	23°38	5°44	21°22	21°54	20°51	18°D58	20°50	22°22	9°26	16°55	S 29
M30	18 32 51	8°21'05	28 ^{III} 49	25°2	17 ^{II} 0	24 ^{III} 9	5° ^{III} 53	21 ^{III} 26	21 ^{III} 53	20° ^{III} 50	18° ^{II} 58	20° ^{II} 47	22° ^{II} 19	9° ^{II} 32	16° ^{II} 58	M30

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	22n 3	19s38	3n41	25n37	2n10	25n25	1n59	8n54	1n12	11n48	1n 9	5n56	2n16	18s12	0n17	21s46	1n25	8n42	17n30	13n55	13n34	0n41	14n50	1s41	
M 2	22 11	19 18	2 48	25 36	2 10	25 14	1 48	8 43	1 10	11 46	1 9	5 56	2 16	18 12	0 17	21 46	1 25	8 42	17 30	13 57	13 35	0 39	14 51	1 41	
T 3	22 18	17 54	1 44	25 33	2 9	25 2	1 36	8 31	1 9	11 43	1 9	5 55	2 16	18 11	0 17	21 46	1 25	8 42	17 29	13 59	13 36	0 37	14 52	1 41	
W 4	22 25	15 27	0 34	25 28	2 7	24 51	1 24	8 20	1 7	11 41	1 8	5 54	2 15	18 11	0 17	21 46	1 25	8 42	17 29	13 59	13 37	0 35	14 53	1 41	
T 5	22 32	12 7	0s39	25 22	2 5	24 38	1 12	8 8	1 6	11 38	1 8	5 54	2 15	18 10	0 17	21 46	1 25	8 42	17 28	13 59	13 39	0 33	14 54	1 42	
F 6	22 39	8 3	1 51	25 14	2 1	24 25	0 59	7 57	1 5	11 36	1 8	5 53	2 15	18 10	0 17	21 45	1 25	8 42	17 28	13 59	13 40	0 31	14 55	1 42	
S 7	22 45	3 30	2 57	25 4	1 57	24 12	0 46	7 45	1 3	11 33	1 8	5 52	2 15	18 9	0 17	21 45	1 25	8 41	17 27	13 59	13 41	0 29	14 56	1 42	
S 8	22 50	1n17	3 52	24 53	1 52	23 59	0 33	7 33	1 2	11 31	1 8	5 51	2 15	18 9	0 17	21 45	1 25	8 41	17 27	14 0	13 42	0 27	14 57	1 42	
M 9	22 55	6 2	4 34	24 41	1 47	23 45	0 19	7 21	1 1	11 28	1 8	5 50	2 14	18 8	0 17	21 45	1 25	8 41	17 26	14 1	13 43	0 25	14 58	1 42	
T 10	23 0	10 27	4 58	24 28	1 41	23 30	0 5	7 9	0 59	11 25	1 8	5 50	2 14	18 7	0 17	21 45	1 25	8 41	17 26	14 4	13 44	0 23	14 58	1 42	
W11	23 5	14 15	5 3	24 13	1 33	23 15	0s 9	6 57	0 58	11 23	1 7	5 49	2 14	18 7	0 17	21 45	1 25	8 40	17 25	14 6	13 45	0 21	14 59	1 42	
T 12	23 9	17 10	4 49	23 58	1 26	23 0	0 23	6 45	0 56	11 20	1 7	5 48	2 14	18 6	0 17	21 45	1 25	8 40	17 25	14 10	13 46	0 19	15 0	1 42	
F 13	23 12	19 0	4 18	23 42	1 17	22 45	0 37	6 32	0 55	11 17	1 7	5 47	2 14	18 6	0 17	21 45	1 25	8 40	17 24	14 13	13 47	0 17	15 1	1 43	
S 14	23 16	19 41	3 32	23 25	1 8	22 30	0 51	6 20	0 54	11 14	1 7	5 46	2 13	18 5	0 17	21 45	1 25	8 40	17 24	14 15	13 48	0 15	15 2	1 43	
S 15	23 18	19 13	2 36	23 7	0 58	22 14	1 6	6 8	0 53	11 11	1 7	5 44	2 13	18 5	0 17	21 45	1 25	8 39	17 23	14 17	13 49	0 13	15 3	1 43	
M16	23 21	17 44	1 32	22 49	0 48	21 59	1 20	5 55	0 51	11 8	1 7	5 43	2 13	18 4	0 17	21 44	1 25	8 39	17 23	14 18	13 50	0 11	15 3	1 43	
T 17	23 23	15 24	0 26	22 31	0 36	21 43	1 33	5 42	0 50	11 5	1 7	5 42	2 13	18 4	0 17	21 44	1 25	8 39	17 22	14 19	13 51	0 9	15 4	1 43	
W18	23 24	12 25	0n40	22 12	0 25	21 27	1 47	5 30	0 49	11 2	1 6	5 41	2 13	18 3	0 17	21 44	1 25	8 38	17 22	14 19	13 52	0 7	15 5	1 43	
T 19	23 25	8 58	1 44	21 53	0 12	21 12	2 0	5 17	0 47	10 59	1 6	5 40	2 12	18 3	0 17	21 44	1 25	8 38	17 21	14 18	13 53	0 5	15 6	1 43	
F 20	23 26	5 12	2 41	21 34	0s 1	20 57	2 13	5 4	0 46	10 56	1 6	5 38	2 12	18 3	0 17	21 44	1 25	8 37	17 21	14 18	13 54	0 2	15 6	1 44	
S 21	23 26	1 16	3 32	21 15	0 14	20 42	2 26	4 51	0 45	10 52	1 6	5 37	2 12	18 2	0 17	21 44	1 25	8 37	17 20	14 18	13 55	0 0	15 7	1 44	
S 22	23 26	2s43	4 13	20 55	0 28	20 27	2 38	4 38	0 44	10 49	1 6	5 36	2 12	18 2	0 17	21 44	1 25	8 37	17 20	14 19	13 56	0s 2	15 8	1 44	
M23	23 26	6 37	4 44	20 37	0 43	20 13	2 50	4 25	0 43	10 46	1 6	5 34	2 12	18 1	0 17	21 44	1 24	8 36	17 19	14 20	13 57	0 4	15 9	1 44	
T 24	23 25	10 18	5 2	20 18	0 58	20 0	3 1	4 12	0 41	10 43	1 6	5 33	2 12	18 1	0 16	21 44	1 24	8 36	17 18	14 21	13 58	0 6	15 9	1 44	
W25	23 23	13 37	5 7	20 0	1 13	19 47	3 12	3 58	0 40	10 39	1 6	5 32	2 11	18 0	0 16	21 44	1 24	8 35	17 18	14 24	13 59	0 8	15 10	1 44	
T 26	23 22	16 23	4 58	19 42	1 29	19 34	3 23	3 45	0 39	10 36	1 6	5 30	2 11	18 0	0 16	21 44	1 24	8 35	17 17	14 26	14 0	0 10	15 11	1 44	
F 27	23 20	18 25	4 33	19 25	1 44	19 22	3 32	3 32	0 38	10 32	1 5	5 29	2 11	18 0	0 16	21 43	1 24	8 34	17 17	14 29	14 1	0 12	15 11	1 45	
S 28	23 17	19 32	3 54	19 8	2 0	19 11	3 42	3 18	0 37	10 29	1 5	5 27	2 11	17 59	0 16	21 43	1 24	8 34	17 16	14 31	14 2	0 14	15 12	1 45	
S 29	23 14	19 35	3 0	18 53	2 16	19 1	3 50	3 5	0 36	10 25	1 5	5 26	2 11	17 59	0 16	21 43	1 24	8 33	17 16	14 33	14 3	0 16	15 13	1 45	
M30	23n11	18s30	1n56	18n38	2s32	18n51	3s59	2n51	0n34	10n22	1n 5	5n24	2n11	17s58	0n16	21s43	1n24	8n33	17n15	14n34	14n 5	0s18	15n13	1s45	

ASTRODIENST EPHEMERIS for the year 1980

geocentric

JULY 1980

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	18 36 48	9 ⁵⁵ 18'16	12 ²⁸ 38	24 ¹⁸ 52	16 ¹⁶ 45	24 ¹⁷ 41	6 ¹⁷ 3	21 ¹⁷ 29	21 ¹⁸ 52	20 ¹⁸ 48	18 ¹⁵ 58	20 ¹⁸ 45	22 ¹⁸ 15	9 ⁵⁵ 39	17 ¹⁸ 0	T 1
W 2	18 40 44	10 ¹⁵ 27	26 ³⁶	24 ²⁵ 39	16 ¹⁷ 32	25 ¹³	6 ¹²	21 ³³	21 ¹⁸ 50	20 ¹⁸ 47	18 ⁵⁸	20 ¹⁸ 45	22 ¹⁹ 12	9 ⁴⁶	17 ³	W 2
T 3	18 44 41	11 ¹² 38	10 ¹⁸ 41	24 ²¹	16 ²¹	25 ⁴⁵	6 ²²	21 ³⁷	21 ¹⁹	20 ⁴⁵	18 ⁵⁸	20 ¹⁸ 46	22 ⁹	9 ⁵²	17 ⁶	T 3
F 4	18 48 37	12 ⁹ 50	24 ⁴⁹	23 ⁵⁹	16 ¹³	26 ¹⁸	6 ³²	21 ⁴¹	21 ⁴⁷	20 ⁴⁴	18 ⁵⁹	20 ⁴⁷	22 ⁶	9 ⁵⁹	17 ⁸	F 4
S 5	18 52 34	13 ⁷ 01	9 ¹⁷ 0	23 ³³	16 ⁸	26 ⁵⁰	6 ⁴²	21 ⁴⁵	21 ⁴⁶	20 ⁴²	18 ⁵⁹	20 ¹⁸ 48	22 ³	10 ⁶	17 ¹¹	S 5
S 6	18 56 31	14 ⁴ 13	23 ¹²	23 ⁴	16 ⁴	27 ²³	6 ⁵²	21 ⁴⁹	21 ⁴⁵	20 ⁴¹	18 ⁵⁹	20 ⁴⁷	22 ⁰	10 ¹³	17 ¹³	S 6
M 7	19 0 27	15 ¹ 26	7 ¹⁸ 23	22 ³²	16 ¹⁰ 3	27 ⁵⁶	7 ²	21 ⁵⁴	21 ⁴⁴	20 ³⁹	18 ⁵⁹	20 ⁴⁶	21 ⁵⁶	10 ¹⁹	17 ¹⁶	M 7
T 8	19 4 24	15 ⁵⁸ 39	21 ²⁹	21 ⁵⁸	16 ⁵	28 ²⁹	7 ¹²	21 ⁵⁸	21 ⁴³	20 ³⁸	18 ⁵⁹	20 ⁴²	21 ⁵³	10 ²⁶	17 ¹⁸	T 8
W 9	19 8 20	16 ⁵⁵ 52	5 ¹¹ 30	21 ²¹	16 ⁸	29 ²	7 ²²	22 ²	21 ⁴²	20 ³⁶	19 ⁰	20 ³⁸	21 ⁵⁰	10 ³³	17 ²¹	W 9
T 10	19 12 17	17 ⁵³ 06	19 ²⁰	20 ⁴⁴	16 ¹⁴	29 ³⁵	7 ³²	22 ⁷	21 ⁴¹	20 ³⁵	19 ⁰	20 ³³	21 ⁴⁷	10 ³⁹	17 ²³	T 10
F 11	19 16 13	18 ⁵⁰ 20	2 ⁵⁸ 58	20 ⁵	16 ²³	0 ¹⁵ 8	7 ⁴³	22 ¹¹	21 ⁴⁰	20 ³⁴	19 ¹	20 ²⁸	21 ⁴⁴	10 ⁴⁶	17 ²⁶	F 11
S 12	19 20 10	19 ⁴⁷ 34	16 ²¹	19 ²⁷	16 ³³	0 ⁴²	7 ⁵³	22 ¹⁶	21 ³⁹	20 ³²	19 ¹	20 ²⁴	21 ⁴¹	10 ⁵³	17 ²⁸	S 12
S 13	19 24 6	20 ⁴⁴ 49	29 ²⁶	18 ⁴⁹	16 ⁴⁵	1 ¹⁶	8 ⁴	22 ²¹	21 ³⁸	20 ³¹	19 ¹	20 ²¹	21 ³⁷	10 ⁵⁹	17 ³⁰	S 13
M14	19 28 3	21 ⁴² 04	12 ¹⁸ 14	18 ¹²	16 ⁵⁹	1 ⁴⁹	8 ¹⁴	22 ²⁶	21 ³⁷	20 ³⁰	19 ²	20 ²⁰	21 ³⁴	11 ⁶	17 ³²	M14
T 15	19 32 0	22 ³⁹ 19	24 ⁴⁶	17 ³⁷	17 ¹⁶	2 ²³	8 ²⁵	22 ³⁰	21 ³⁶	20 ²⁸	19 ²	20 ¹⁹	21 ³¹	11 ¹³	17 ³⁴	T 15
W16	19 35 56	23 ³⁶ 34	7 ¹⁷ 2	17 ⁵	17 ³⁴	2 ⁵⁷	8 ³⁶	22 ³⁵	21 ³⁵	20 ²⁷	19 ³	20 ²⁰	21 ²⁸	11 ¹⁹	17 ³⁶	W16
T 17	19 39 53	24 ³³ 49	19 ⁶	16 ³⁶	17 ⁵⁴	3 ³²	8 ⁴⁷	22 ⁴⁰	21 ³⁵	20 ²⁶	19 ⁴	20 ²²	21 ²⁵	11 ²⁶	17 ³⁹	T 17
F 18	19 43 49	25 ³¹ 04	1 ¹⁵ 2	16 ¹⁰	18 ¹⁵	4 ⁶	8 ⁵⁸	22 ⁴⁵	21 ³⁴	20 ²⁴	19 ⁴	20 ²⁴	21 ²¹	11 ³³	17 ⁴¹	F 18
S 19	19 47 46	26 ²⁸ 20	12 ⁵⁴	15 ⁴⁹	18 ³⁹	4 ⁴⁰	9 ⁹	22 ⁵¹	21 ³³	20 ²³	19 ⁵	20 ²⁵	21 ¹⁸	11 ⁴⁰	17 ⁴²	S 19
S 20	19 51 42	27 ²⁵ 36	24 ⁴⁶	15 ³²	19 ⁴	5 ¹⁵	9 ²⁰	22 ⁵⁶	21 ³³	20 ²²	19 ⁶	20 ¹⁸	21 ¹⁵	11 ⁴⁶	17 ⁴⁴	S 20
M21	19 55 39	28 ²² 52	6 ¹⁸ 43	15 ²⁰	19 ³⁰	5 ⁵⁰	9 ³¹	23 ¹	21 ³²	20 ²¹	19 ⁶	20 ²⁵	21 ¹²	11 ⁵³	17 ⁴⁶	M21
T 22	19 59 35	29 ²⁰ 09	18 ⁵⁰	15 ¹⁴	19 ⁵⁸	6 ²⁴	9 ⁴²	23 ⁶	21 ³²	20 ²⁰	19 ⁷	20 ²⁴	21 ⁹	12 ⁰	17 ⁴⁸	T 22
W23	20 3 32	0 ¹⁷ 25	1 ¹⁷ 12	15 ¹⁰ 12	20 ²⁸	6 ⁵⁹	9 ⁵⁴	23 ¹²	21 ³¹	20 ¹⁸	19 ⁸	20 ²²	21 ⁶	12 ⁶	17 ⁵⁰	W23
T 24	20 7 29	1 ¹⁴ 43	13 ⁵¹	15 ¹⁷	20 ⁵⁹	7 ³⁵	10 ⁵	23 ¹⁷	21 ³¹	20 ¹⁷	19 ⁹	20 ²⁰	21 ²	12 ¹³	17 ⁵¹	T 24
F 25	20 11 25	2 ¹² 00	26 ⁵⁰	15 ²⁸	21 ³²	8 ¹⁰	10 ¹⁶	23 ²³	21 ³¹	20 ¹⁶	19 ¹⁰	20 ¹⁷	20 ⁵⁹	12 ²⁰	17 ⁵³	F 25
S 26	20 15 22	3 ⁹ 18	10 ¹³ 11	15 ⁴⁴	22 ⁵	8 ⁴⁵	10 ²⁸	23 ²⁸	21 ³⁰	20 ¹⁵	19 ¹⁰	20 ¹⁵	20 ⁵⁶	12 ²⁶	17 ⁵⁵	S 26
S 27	20 19 18	4 ⁶ 37	23 ⁵²	16 ⁶	22 ⁴⁰	9 ²⁰	10 ³⁹	23 ³⁴	21 ³⁰	20 ¹⁴	19 ¹¹	20 ¹³	20 ⁵³	12 ³³	17 ⁵⁶	S 27
M28	20 23 15	5 ³ 57	7 ¹⁸ 52	16 ³⁵	23 ¹⁷	9 ⁵⁶	10 ⁵¹	23 ⁴⁰	21 ³⁰	20 ¹³	19 ¹²	20 ¹²	20 ⁵⁰	12 ⁴⁰	17 ⁵⁸	M28
T 29	20 27 11	6 ¹ 17	22 ⁶	17 ¹⁰	23 ⁵⁴	10 ³²	11 ³	23 ⁴⁶	21 ³⁰	20 ¹²	19 ¹³	20 ¹¹	20 ⁴⁷	12 ⁴⁶	17 ⁵⁹	T 29
W30	20 31 8	6 ⁵⁸ 38	6 ¹⁸ 31	17 ⁵⁰	24 ³³	11 ⁷	11 ¹⁴	23 ⁵¹	21 ²⁰ 30	20 ¹¹	19 ¹⁴	20 ¹²	20 ⁴³	12 ⁵³	18 ¹	W30
T 31	20 35 4	7 ¹⁵ 55'59	21 ¹⁸ 0	18 ⁵³ 37	25 ¹¹ 13	11 ¹⁵ 43	11 ¹⁷ 26	23 ¹⁷ 57	21 ¹⁸ 30	20 ¹⁰ 10	19 ¹⁵ 15	20 ¹² 13	20 ¹² 40	13 ¹⁵ 0	18 ¹⁸ 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
T 1	23n 7	16s19	0n44	18n24	2s48	18n42	4s 6	2n37	0n33	10n18	1n 5	5n22	2n10	17s58	0n16	21s43	1n24	8n32	17n15	14n35	14n 6	0s20	15n14	1s45					
W 2	23 3	13 9	0s32	18 11	3 3	18 34	4 13	2 24	0 32	10 14	1 5	5 21	2 10	17 58	0 16	21 43	1 24	8 32	17 14	14 35	14 7	0 22	15 15	1 45					
T 3	22 58	9 12	1 46	18 0	3 18	18 26	4 20	2 10	0 31	10 11	1 5	5 19	2 10	17 57	0 16	21 43	1 24	8 31	17 13	14 34	14 8	0 24	15 15	1 46					
F 4	22 53	4 44	2 55	17 49	3 32	18 19	4 26	1 56	0 30	10 7	1 5	5 17	2 10	17 57	0 16	21 43	1 24	8 31	17 13	14 34	14 9	0 26	15 16	1 46					
S 5	22 48	0n 0	3 53	17 40	3 46	18 13	4 31	1 42	0 29	10 3	1 5	5 15	2 10	17 57	0 16	21 43	1 24	8 30	17 12	14 34	14 10	0 28	15 16	1 46					
S 6	22 42	4 44	4 36	17 32	3 59	18 8	4 36	1 28	0 28	10 0	1 5	5 14	2 10	17 56	0 16	21 43	1 24	8 29	17 12	14 34	14 11	0 31	15 17	1 46					
M 7	22 36	9 12	5 3	17 26	4 11	18 3	4 41	1 14	0 27	9 56	1 4	5 12	2 9	17 56	0 16	21 43	1 24	8 29	17 11	14 34	14 12	0 33	15 17	1 46					
T 8	22 29	13 7	5 11	17 21	4 21	18 0	4 45	1 0	0 26	9 52	1 4	5 10	2 9	17 56	0 16	21 43	1 24	8 28	17 11	14 35	14 13	0 35	15 18	1 46					
W 9	22 22	16 17	5 1	17 17	4 31	17 56	4 48	0 46	0 25	9 48	1 4	5 8	2 9	17 56	0 16	21 43	1 24	8 27	17 10	14 37	14 14	0 37	15 18	1 47					
T 10	22 15	18 28	4 33	17 15	4 39	17 54	4 51	0 32	0 24	9 44	1 4	5 6	2 9	17 55	0 16	21 42	1 24	8 27	17 9	14 38	14 15	0 39	15 19	1 47					
F 11	22 7	19 34	3 50	17 14	4 45	17 52	4 54	0 17	0 23	9 40	1 4	5 4	2 9	17 55	0 16	21 42	1 24	8 26	17 9	14 40	14 16	0 41	15 19	1 47					
S 12	21 59	19 32	2 55	17 15	4 50	17 51	4 56	0 3	0 22	9 36	1 4	5 2	2 9	17 55	0 16	21 42	1 24	8 25	17 8	14 41	14 17	0 43	15 20	1 47					
S 13	21 50	18 27	1 52	17 17	4 53	17 50	4 58	0s11	0 20	9 32	1 4	5 0	2 8	17 55	0 16	21 42	1 24	8 25	17 8	14 42	14 18	0 45	15 20	1 47					
M14	21 41	16 25	0 44	17 20	4 55	17 50	5 0	0 26	0 19	9 28	1 4	4 58	2 8	17 55	0 16	21 42	1 24	8 24	17 7	14 43	14 19	0 47	15 21	1 47					
T 15	21 32	13 39	0n24	17 24	4 55	17 50	5 1	0 40	0 18	9 24	1 4	4 56	2 8	17 54	0 16	21 42	1 24	8 23	17 7	14 43	14 20	0 49	15 21	1 48					
W16	21 23	10 20	1 31	17 30	4 53	17 51	5 2	0 55	0 17	9 20	1 4	4 54	2 8	17 54	0 16	21 42	1 24	8 23	17 6	14 42	14 21	0 51	15 22	1 48					
T 17	21 13	6 38	2 32	17 37	4 50	17 52	5 2	1 9	0 16	9 16	1 4	4 52	2 8	17 54	0 16	21 42	1 24	8 22	17 5	14 42	14 22	0 53	15 22	1 48					
F 18	21 2	2 44	3 25	17 45	4 45	17 54	5 3	1 24	0 15	9 11	1 4	4 50	2 8	17 54	0 16	21 42	1 24	8 21	17 5	14 41	14 23	0 55	15 22	1 48					
S 19	20 52	1s15	4 10	17 53	4 39	17 56	5 3	1 38	0 14	9 7	1 3	4 48	2 8	17 54	0 16	21 42	1 24	8 20	17 4	14 41	14 24	0 58	15 23	1 48					
S 20	20 41	5 11	4 44	18 3	4 31	17 58	5 2	1 53	0 14	9 3	1 3	4 45	2 7	17 54	0 16	21 42	1 24	8 20	17 4	14 41	14 25	1 0	15 23	1 48					
M21	20 29	8 56	5 6	18 13	4 22	18 1	5 2	2 7	0 13	8 59	1 3	4 43	2 7	17 54	0 16	21 42	1 24	8 19	17 3	14 41	14 26	1 2	15 23	1 49					
T 22	20 17	12 22	5 15	18 24	4 12	18 4	5 1	2 22	0 12	8 54	1 3	4 41	2 7	17 53	0 16	21 42	1 24	8 18	17 3	14 41	14 27	1 4	15 24	1 49					
W23	20 5	15 21	5 10	18 35	4 0	18 7	5 0	2 37	0 11	8 50	1 3	4 39	2 7	17 53	0 16	21 42	1 24	8 17	17 2	14 42	14 28	1 6	15 24	1 49					
T 24	19 53	17 41	4 49	18 47	3 48	18 10	4 58	2 51	0 10	8 46	1 3	4 36	2 7	17 53	0 16	21 42	1 24	8 16	17 2	14 43	14 29	1 8	15 24	1 49					
F 25	19 40	19 11	4 14	18 59	3 35	18 14	4 57	3 6	0 9	8 41	1 3	4 34	2 7	17 53	0 16	21 42	1 24	8 16	17 1	14 44	14 30	1 10	15 25	1 49					
S 26	19 27	19 40	3 23	19 10	3 22	18 18	4 55	3 21	0 8	8 37	1 3	4 32	2 7	17 53	0 16	21 42	1 24	8 15	17 1	14 44	14 31	1 12	15 25	1 50					
S 27	19 14	19 2	2 20	19 22	3 8	18 22	4 53	3 36	0 7	8 33	1 3	4 29	2 7	17 53	0 16	21 42	1 24	8 14	17 0	14 45	14 32	1 14	15 25	1 50					
M28	19 0	17 13	1 8	19 33	2 53	18 26	4 51	3 51	0 6	8 28	1 3	4 27	2 6	17 53	0 16	21 42	1 23	8 13	16 59	14 45	14 33	1 16	15 25	1 50					
T 29	18 46	14 19	0s11	19 44	2 38	18 30	4 48	4 5	0 5	8 24	1 3	4 25	2 6	17 53	0 16	21 41	1 23	8 12	16 59	14 45	14 34	1 18	15 26	1 50					
W30	18 32	10 30	1 29	19 54	2 23	18 34	4 46	4 20	0 4	8 19	1 3	4 22	2 6	17 53	0 16	21 41	1 23	8 11	16 58	14 45	14 35	1 20	15 26	1 50					
T 31	18n17	6s 3	2s42	20n 3	2s 7	18n38	4s43	4s35	0n 3	8n15	1n 3	4n20	2n 6	17s53	0n16	21s41	1n23	8n11	16n58	14n45	14n36	1s23	15n26	1s50					

ASTRODIENST EPHEMERIS for the year 1980

geocentric

AUGUST 1980

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	20 39 1	8♂53'22	5♂30	19♂29	25♂53	12♂19	11♂38	24♂3	21♂30	20♂R 9	19♂16	20♂14	20♂37	13♂7	18♂3	F 1
S 2	20 42 58	9°50'46	19°55	20°27	26°35	12°55	11°50	24°9	21°30	20♂8	19°18	20°14	20°34	13°13	18°4	S 2
S 3	20 46 54	10°48'11	4♂12	21°31	27°18	13°32	12°2	24°15	21°30	20°7	19°19	20°15	20°31	13°20	18°5	S 3
M 4	20 50 51	11°45'38	18°18	22°41	28°2	14°8	12°14	24°21	21°30	20°6	19°20	20°R15	20°27	13°27	18°7	M 4
T 5	20 54 47	12°43'06	2♂13	23°56	28°47	14°44	12°26	24°27	21°31	20°6	19°21	20°14	20°24	13°33	18°8	T 5
W 6	20 58 44	13°40'35	15°53	25°16	29°32	15°21	12°38	24°34	21°31	20°5	19°22	20°14	20°21	13°40	18°9	W 6
T 7	21 2 40	14°38'05	29°20	26°41	0♂19	15°58	12°50	24°40	21°31	20°4	19°24	20°13	20°18	13°47	18°10	T 7
F 8	21 6 37	15°35'37	12♂33	28°11	1°6	16°34	13°2	24°46	21°32	20°3	19°25	20°13	20°15	13°53	18°10	F 8
S 9	21 10 33	16°33'10	25°31	29°46	1°54	17°11	13°14	24°53	21°32	20°3	19°26	20°12	20°12	14°0	18°11	S 9
S 10	21 14 30	17°30'44	8♂16	1♂25	2°43	17°48	13°27	24°59	21°33	20°2	19°28	20°12	20°8	14°7	18°12	S 10
M 11	21 18 27	18°28'19	20°47	3°7	3°32	18°25	13°39	25°5	21°33	20°1	19°29	20°D12	20°5	14°13	18°13	M 11
T 12	21 22 23	19°25'55	3♂7	4°53	4°22	19°3	13°51	25°12	21°34	20°1	19°30	20°12	20°2	14°20	18°13	T 12
W 13	21 26 20	20°23'33	15°15	6°43	5°13	19°40	14°4	25°18	21°35	20°0	19°32	20°R12	19°59	14°27	18°14	W 13
T 14	21 30 16	21°21'11	27°15	8°35	6°5	20°17	14°16	25°25	21°35	19°59	19°33	20°12	19°56	14°34	18°14	T 14
F 15	21 34 13	22°18'51	9♂9	10°29	6°57	20°55	14°28	25°32	21°36	19°59	19°35	20°12	19°53	14°40	18°15	F 15
S 16	21 38 9	23°16'31	20°59	12°26	7°50	21°33	14°41	25°38	21°37	19°58	19°36	20°11	19°49	14°47	18°15	S 16
S 17	21 42 6	24°14'13	2♂51	14°24	8°43	22°10	14°53	25°45	21°38	19°58	19°38	20°11	19°46	14°54	18°16	S 17
M 18	21 46 2	25°11'56	14°47	16°23	9°37	22°48	15°6	25°52	21°39	19°57	19°39	20°11	19°43	15°0	18°16	M 18
T 19	21 49 59	26°9'40	26°53	18°23	10°32	23°26	15°19	25°59	21°40	19°57	19°41	20°D11	19°40	15°7	18°16	T 19
W 20	21 53 56	27°7'25	9♂12	20°24	11°27	24°4	15°31	26°5	21°41	19°56	19°42	20°11	19°37	15°14	18°16	W 20
T 21	21 57 52	28°5'11	21°50	22°25	12°22	24°42	15°44	26°12	21°42	19°56	19°44	20°11	19°33	15°20	18°17	T 21
F 22	22 1 49	29°2'58	4♂49	24°26	13°18	25°20	15°57	26°19	21°43	19°56	19°46	20°12	19°30	15°27	18°17	F 22
S 23	22 5 45	0♂7'47	18°12	26°26	14°15	25°59	16°9	26°26	21°44	19°55	19°47	20°13	19°27	15°34	18°R17	S 23
S 24	22 9 42	0°58'36	2♂1	28°26	15°12	26°37	16°22	26°33	21°46	19°55	19°49	20°14	19°24	15°41	18°17	S 24
M 25	22 13 38	1°56'27	16°14	0♂26	16°9	27°16	16°35	26°40	21°47	19°55	19°51	20°R14	19°21	15°47	18°17	M 25
T 26	22 17 35	2°54'20	0♂47	2°25	17°7	27°54	16°47	26°47	21°48	19°55	19°53	20°14	19°18	15°54	18°16	T 26
W 27	22 21 31	3°52'14	15°35	4°22	18°6	28°33	17°0	26°54	21°50	19°55	19°55	20°13	19°14	16°1	18°16	W 27
T 28	22 25 28	4°50'09	0♂31	6°19	19°4	29°12	17°13	27°1	21°51	19°54	19°56	20°12	19°11	16°7	18°16	T 28
F 29	22 29 25	5°48'06	15°25	8°15	20°4	29°51	17°26	27°8	21°52	19°54	19°58	20°10	19°8	16°14	18°15	F 29
S 30	22 33 21	6°46'05	0♂12	10°10	21°3	0♂30	17°39	27°15	21°54	19°54	20°0	20°8	19°5	16°21	18°15	S 30
S 31	22 37 18	7♂44'06	14♂43	12♂3	22♂3	1♂9	17♂52	27♂22	21♂56	19♂54	20♂2	20♂6	19♂2	16♂27	18♂15	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	18n 2	1s16	3s45	20n11	1s52	18n42	4s40	4s50	0n 2	8n10	1n 3	4n17	2n 6	17s53	0n16	21s41	1n23	8n10	16n57	14n45	14n37	1s25	15n26	1s51	15n27
S 2	17 47	3n34	4 34	20 18	1 36	18 47	4 37	5 5	0 1	8 5	1 3	4 15	2 6	17 53	0 16	21 41	1 23	8 9	16 57	14 44	14 38	1 27	15 26	1 51	15 27
S 3	17 31	8 8	5 5	20 24	1 21	18 51	4 34	5 20	0 1	8 1	1 3	4 12	2 6	17 53	0 16	21 41	1 23	8 8	16 56	14 44	14 39	1 29	15 26	1 51	15 27
M 4	17 16	12 12	5 17	20 27	1 5	18 55	4 31	5 35	0s 0	7 56	1 3	4 10	2 6	17 53	0 16	21 41	1 23	8 7	16 56	14 44	14 40	1 31	15 27	1 51	15 27
T 5	17 0	15 32	5 10	20 30	0 50	18 59	4 27	5 50	0 1	7 52	1 3	4 7	2 6	17 53	0 16	21 41	1 23	8 6	16 55	14 44	14 41	1 33	15 27	1 51	15 27
W 6	16 43	17 57	4 46	20 30	0 36	19 2	4 24	6 5	0 2	7 47	1 2	4 5	2 5	17 54	0 16	21 41	1 23	8 5	16 55	14 45	14 42	1 35	15 27	1 52	15 27
T 7	16 27	19 20	4 6	20 28	0 22	19 6	4 20	6 19	0 3	7 42	1 2	4 2	2 5	17 54	0 16	21 41	1 23	8 4	16 54	14 45	14 43	1 37	15 27	1 52	15 27
F 8	16 10	19 38	3 14	20 24	0 8	19 10	4 17	6 34	0 4	7 38	1 2	4 0	2 5	17 54	0 15	21 41	1 23	8 3	16 54	14 45	14 44	1 39	15 27	1 52	15 27
S 9	15 53	18 52	2 13	20 17	0n 5	19 13	4 13	6 49	0 5	7 33	1 2	3 57	2 5	17 54	0 15	21 41	1 23	8 2	16 53	14 45	14 45	1 41	15 27	1 52	15 27
S 10	15 35	17 8	1 6	20 8	0 18	19 16	4 9	7 4	0 5	7 28	1 2	3 54	2 5	17 54	0 15	21 41	1 23	8 1	16 53	14 45	14 46	1 43	15 27	1 52	15 27
M 11	15 17	14 37	0n 3	19 56	0 29	19 19	4 5	7 19	0 6	7 23	1 2	3 52	2 5	17 54	0 15	21 41	1 23	8 1	16 52	14 45	14 47	1 46	15 27	1 53	15 27
T 12	15 0	11 28	1 11	19 42	0 40	19 22	4 1	7 34	0 7	7 19	1 2	3 49	2 5	17 54	0 15	21 41	1 23	8 0	16 52	14 45	14 48	1 48	15 27	1 53	15 27
W 13	14 41	7 53	2 15	19 25	0 51	19 24	3 56	7 49	0 8	7 14	1 2	3 46	2 5	17 55	0 15	21 41	1 23	7 59	16 51	14 45	14 49	1 50	15 27	1 53	15 27
T 14	14 23	4 1	3 11	19 5	1 0	19 26	3 52	8 4	0 9	7 9	1 2	3 44	2 5	17 55	0 15	21 41	1 23	7 58	16 51	14 45	14 50	1 52	15 27	1 53	15 27
F 15	14 4	0 3	3 59	18 42	1 8	19 28	3 48	8 19	0 9	7 4	1 2	3 41	2 5	17 55	0 15	21 41	1 23	7 57	16 50	14 45	14 51	1 54	15 27	1 53	15 27
S 16	13 46	3s55	4 37	18 17	1 16	19 30	3 43	8 33	0 10	6 59	1 2	3 38	2 5	17 55	0 15	21 41	1 23	7 56	16 50	14 45	14 52	1 56	15 27	1 54	15 27
S 17	13 27	7 43	5 3	17 50	1 23	19 31	3 39	8 48	0 11	6 54	1 2	3 36	2 5	17 56	0 15	21 41	1 23	7 55	16 49	14 45	14 53	1 58	15 27	1 54	15 27
M 18	13 7	11 14	5 16	17 20	1 29	19 32	3 34	9 3	0 12	6 50	1 2	3 33	2 5	17 56	0 15	21 41	1 23	7 54	16 49	14 46	14 54	2 0	15 27	1 54	15 27
T 19	12 48	14 21	5 15	16 48	1 34	19 32	3 30	9 18	0 13	6 45	1 2	3 30	2 4	17 56	0 15	21 41	1 22	7 53	16 49	14 46	14 55	2 2	15 26	1 54	15 27
W 20	12 28	16 53	5 0	16 14	1 38	19 33	3 25	9 33	0 13	6 40	1 2	3 27	2 4	17 56	0 15	21 41	1 22	7 52	16 48	14 46	14 56	2 5	15 26	1 54	15 27
T 21	12 8	18 42	4 30	15 38	1 41	19 33	3 20	9 47	0 14	6 35	1 2	3 25	2 4	17 57	0 15	21 41	1 22	7 51	16 48	14 45	14 57	2 7	15 26	1 55	15 27
F 22	11 48	19 35	3 46	15 0	1 43	19 32	3 15	10 2	0 15	6 30	1 2	3 22	2 4	17 57	0 15	21 41	1 22	7 50	16 47	14 45	14 58	2 9	15 26	1 55	15 27
S 23	11 28	19 25	2 48	14 21	1 45	19 31	3 11	10 17	0 16	6 25	1 2	3 19	2 4	17 57	0 15	21 41	1 22	7 49	16 47	14 45	14 59	2 11	15 26	1 55	15 27
S 24	11 8	18 6	1 39	13 40	1 46	19 30	3 6	10 31	0 17	6 20	1 2	3 16	2 4	17 58	0 15	21 41	1 22	7 48	16 46	14 45	15 0	2 13	15 26	1 55	15 27
M 25	10 47	15 37	0 22	12 58	1 46	19 28	3 1	10 46	0 17	6 15	1 2	3 13	2 4	17 58	0 15	21 41	1 22	7 47	16 46	14 44	15 1	2 15	15 25	1 55	15 27
T 26	10 26	12 6	0s58	12 15	1 45	19 26	2 56	11 1	0 18	6 10	1 2	3 11	2 4	17 58	0 15	21 42	1 22	7 46	16 46	14 45	15 2	2 17	15 25	1 56	15 27
W 27	10 5	7 46	2 16	11 32	1 44	19 24	2 51	11 15	0 19	6 5	1 2	3 8	2 4	17 59	0 15	21 42	1 22	7 45	16 45	14 45	15 3	2 19	15 25	1 56	15 27
T 28	9 44	2 56	3 25	10 47	1 43	19 21	2 46	11 30	0 20	6 0	1 2	3 5	2 4	17 59	0 15	21 42	1 22	7 44	16 45	14 45	15 4	2 21	15 25	1 56	15 27
F 29	9 23	2n 5	4 20	10 2	1 40	19 17	2 41	11 44	0 20	5 55	1 2	3 2	2 4	18 0	0 15	21 42	1 22	7 43	16 44	14 46	15 5	2 23	15 24	1 56	15 27
S 30	9 2	6 54	4 57	9 16	1 37	19 13	2 36	11 58	0 21	5 50	1 2	2 59	2 4	18 0	0 15	21 42	1 22	7 42	16 44	14 46	15 6	2 26	15 24	1 56	15 27
S 31	8n40	11n15	5s14	8n30	1n34	19n 9	2s31	12s13	0s22	5n45	1n 2	2n56	2n 4	18s 0	0n15	21s42	1n22	7n41	16n44	14n47	15n 7	2s28	15n24	1s57	15 27

ASTRODIENST EPHEMERIS for the year 1980

geocentric

SEPTEMBER 1980

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	22 41 14	8 ^h 42'09"	28 ^h 56'	13 ^h 55'	23 ^h 56' 3	1 ^h 48'	18 ^h 4'	27 ^h 30'	21 ^h 57'	19 ^h D54	20 ^h 4'	20 ^h R 5	18 ^h Ω58	16 ^h Ω34	18 ^h R14	M 1
T 2	22 45 11	9 ^h 40'14"	12 ^h 48'	15 ^h 46'	24 ^h 4	2 ^h 27'	18 ^h 17'	27 ^h 37'	21 ^h 59'	19 ^h ♂54	20 ^h 6	20 ^h D 5	18 ^h 55'	16 ^h 41'	18 ^h ♂14	T 2
W 3	22 49 7	10 ^h 38'21"	26 ^h 19'	17 ^h 36'	25 ^h 5	3 ^h 6	18 ^h 30'	27 ^h 44'	22 ^h 1	19 ^h 54	20 ^h 8	20 ^h Ω 6	18 ^h 52'	16 ^h 48'	18 ^h 13	W 3
T 4	22 53 4	11 ^h 36'30"	9 ^h 30'	19 ^h 25'	26 ^h 7	3 ^h 46'	18 ^h 43'	27 ^h 51'	22 ^h 2	19 ^h 54	20 ^h 10	20 ^h 7	18 ^h 49'	16 ^h 54'	18 ^h 12	T 4
F 5	22 57 0	12 ^h 34'41"	22 ^h 24'	21 ^h 12'	27 ^h 9	4 ^h 25'	18 ^h 56'	27 ^h 59'	22 ^h 4	19 ^h 54	20 ^h 12	20 ^h 8	18 ^h 46'	17 ^h 1	18 ^h 11	F 5
S 6	23 0 57	13 ^h 32'53"	5 ^h Ω 3	22 ^h 58'	28 ^h 11'	5 ^h 5	19 ^h 9	28 ^h 6	22 ^h 6	19 ^h 55	20 ^h 14	20 ^h 10	18 ^h 43'	17 ^h 8	18 ^h 11	S 6
S 7	23 4 53	14 ^h 31'08"	17 ^h 29'	24 ^h 44'	29 ^h 13'	5 ^h 45'	19 ^h 22'	28 ^h 13'	22 ^h 8	19 ^h 55	20 ^h 16	20 ^h R10	18 ^h 39'	17 ^h 14'	18 ^h 10	S 7
M 8	23 8 50	15 ^h 29'24"	29 ^h 44'	26 ^h 27'	0 ^h Ω16	6 ^h 24'	19 ^h 35'	28 ^h 20'	22 ^h 10'	19 ^h 55	20 ^h 18	20 ^h 10	18 ^h 36'	17 ^h 21'	18 ^h 9	M 8
T 9	23 12 47	16 ^h 27'43"	11 ^h 19'	28 ^h 10'	1 ^h 19'	7 ^h 4	19 ^h 48'	28 ^h 28'	22 ^h 12'	19 ^h 55	20 ^h 20	20 ^h 8	18 ^h 33'	17 ^h 28'	18 ^h 8	T 9
W10	23 16 43	17 ^h 26'03"	23 ^h 51'	29 ^h 52'	2 ^h 22'	7 ^h 44'	20 ^h 1	28 ^h 35'	22 ^h 14'	19 ^h 56	20 ^h 22	20 ^h 5	18 ^h 30'	17 ^h 34'	18 ^h 7	W10
T 11	23 20 40	18 ^h 24'24"	5 ^h Ω46	1 ^h Ω32	3 ^h 26'	8 ^h 24'	20 ^h 14'	28 ^h 42'	22 ^h 16'	19 ^h 56	20 ^h 24	20 ^h 1	18 ^h 27'	17 ^h 41'	18 ^h 6	T 11
F 12	23 24 36	19 ^h 22'48"	17 ^h 37'	3 ^h 11'	4 ^h 30'	9 ^h 5	20 ^h 27'	28 ^h 50'	22 ^h 18'	19 ^h 56	20 ^h 26	19 ^h 56	18 ^h 24'	17 ^h 48'	18 ^h 5	F 12
S 13	23 28 33	20 ^h 21'13"	29 ^h 28'	4 ^h 49'	5 ^h 34'	9 ^h 45'	20 ^h 40'	28 ^h 57'	22 ^h 20'	19 ^h 57	20 ^h 28	19 ^h 51	18 ^h 20'	17 ^h 55'	18 ^h 3	S 13
S 14	23 32 29	21 ^h 19'40"	11 ^h Ω19	6 ^h 27'	6 ^h 38'	10 ^h 25'	20 ^h 53'	29 ^h 5	22 ^h 23'	19 ^h 57	20 ^h 30	19 ^h 46	18 ^h 17'	18 ^h 1	18 ^h 2	S 14
M15	23 36 26	22 ^h 18'09"	23 ^h 15'	8 ^h 3	7 ^h 43'	11 ^h 6	21 ^h 6	29 ^h 12'	22 ^h 25'	19 ^h 57	20 ^h 32	19 ^h 41	18 ^h 14'	18 ^h 8	18 ^h 1	M15
T 16	23 40 22	23 ^h 16'40"	5 ^h ♂19	9 ^h 37'	8 ^h 48'	11 ^h 46'	21 ^h 19'	29 ^h 19'	22 ^h 27'	19 ^h 58	20 ^h 35	19 ^h 38	18 ^h 11'	18 ^h 15'	17 ^h 59'	T 16
W17	23 44 19	24 ^h 15'12"	17 ^h 35'	11 ^h 11'	9 ^h 53'	12 ^h 27'	21 ^h 32'	29 ^h 27'	22 ^h 29'	19 ^h 58	20 ^h 37	19 ^h 37	18 ^h 8	18 ^h 21'	17 ^h 58'	W17
T 18	23 48 16	25 ^h 13'45"	0 ^h ♂ 8	12 ^h 44'	10 ^h 58'	13 ^h 7	21 ^h 45'	29 ^h 34'	22 ^h 32'	19 ^h 59	20 ^h 39	19 ^h D36	18 ^h 4	18 ^h 28'	17 ^h 57'	T 18
F 19	23 52 12	26 ^h 12'21"	13 ^h 1	14 ^h 16'	12 ^h 4	13 ^h 48'	21 ^h 58'	29 ^h 42'	22 ^h 34'	20 ^h 0	20 ^h 41	19 ^h 37	18 ^h 1	18 ^h 35'	17 ^h 55'	F 19
S 20	23 56 9	27 ^h 10'58"	26 ^h 19'	15 ^h 47'	13 ^h 10'	14 ^h 29'	22 ^h 11'	29 ^h 49'	22 ^h 37'	20 ^h 0	20 ^h 43	19 ^h 39	17 ^h 58'	18 ^h 42'	17 ^h 53'	S 20
S 21	0 0 5	28 ^h 9'37"	10 ^h ♂ 4	17 ^h 17'	14 ^h 16'	15 ^h 10'	22 ^h 24'	29 ^h 57'	22 ^h 39'	20 ^h 1	20 ^h 46	19 ^h 40	17 ^h 55'	18 ^h 48'	17 ^h 52'	S 21
M22	0 4 2	29 ^h 8'17"	24 ^h 17'	18 ^h 45'	15 ^h 22'	15 ^h 51'	22 ^h 37'	0 ^h Ω 4	22 ^h 42'	20 ^h 1	20 ^h 48	19 ^h R40	17 ^h 52'	18 ^h 55'	17 ^h 50'	M22
T 23	0 7 58	0 ^h Ω 6'59"	8 ^h ♂56	20 ^h 13'	16 ^h 29'	16 ^h 32'	22 ^h 50'	0 ^h 12'	22 ^h 44'	20 ^h 2	20 ^h 50	19 ^h 39	17 ^h 49'	19 ^h 2	17 ^h 48'	T 23
W24	0 11 55	1 ^h 5'43"	23 ^h 55'	21 ^h 39'	17 ^h 35'	17 ^h 13'	23 ^h 3	0 ^h 19'	22 ^h 47'	20 ^h 3	20 ^h 52	19 ^h 36	17 ^h 45'	19 ^h 8	17 ^h 47'	W24
T 25	0 15 51	2 ^h 4'29"	9 ^h ♂ 8	23 ^h 5	18 ^h 42'	17 ^h 55'	23 ^h 16'	0 ^h 26'	22 ^h 50'	20 ^h 4	20 ^h 55	19 ^h 31	17 ^h 42'	19 ^h 15'	17 ^h 45'	T 25
F 26	0 19 48	3 ^h 3'17"	24 ^h 23'	24 ^h 29'	19 ^h 50'	18 ^h 36'	23 ^h 29'	0 ^h 34'	22 ^h 52'	20 ^h 4	20 ^h 57	19 ^h 24	17 ^h 39'	19 ^h 22'	17 ^h 43'	F 26
S 27	0 23 45	4 ^h 2'07"	9 ^h ♂30	25 ^h 53'	20 ^h 57'	19 ^h 17'	23 ^h 41'	0 ^h 41'	22 ^h 55'	20 ^h 5	20 ^h 59	19 ^h 18	17 ^h 36'	19 ^h 28'	17 ^h 41'	S 27
S 28	0 27 41	5 ^h 0'59"	24 ^h 20'	27 ^h 15'	22 ^h 4	19 ^h 59'	23 ^h 54'	0 ^h 49'	22 ^h 58'	20 ^h 6	21 ^h 2	19 ^h 12	17 ^h 33'	19 ^h 35'	17 ^h 39'	S 28
M29	0 31 38	5 ^h 59'54"	8 ^h ♂46	28 ^h 36'	23 ^h 12'	20 ^h 40'	24 ^h 7	0 ^h 56'	23 ^h 1	20 ^h 7	21 ^h 4	19 ^h 7	17 ^h 29'	19 ^h 42'	17 ^h 37'	M29
T 30	0 35 34	6 ^h Ω58'51"	22 ^h ♂45	29 ^h Ω56	24 ^h Ω20	21 ^h Ω22	24 ^h Ω20	1 ^h Ω 4	23 ^h Ω 3	20 ^h ♂ 8	21 ^h Ω 6	19 ^h Ω 4	17 ^h Ω26	19 ^h Ω49	17 ^h Ω35	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
M 1	8n18	14n51	5s12	7n43	1n30	19n 4	2s26	12s27	0s22	5n40	1n 2	2n53	2n 4	18s 1	0n15	21s42	1n22	7n40	16n43	14n47	15n 8	2s30	15n23	1s57			
T 2	7 57	17 31	4 51	6 56	1 26	18 59	2 21	12 41	0 23	5 35	1 2	2 51	2 4	18 1	0 15	21 42	1 22	7 39	16 43	14 47	15 9	2 32	15 23	1 57			
W 3	7 35	19 8	4 15	6 9	1 22	18 53	2 16	12 55	0 24	5 30	1 2	2 48	2 4	18 2	0 15	21 42	1 22	7 38	16 43	14 47	15 10	2 34	15 23	1 57			
T 4	7 13	19 41	3 26	5 22	1 17	18 47	2 11	13 9	0 25	5 25	1 2	2 45	2 4	18 2	0 15	21 42	1 22	7 37	16 42	14 47	15 11	2 36	15 22	1 57			
F 5	6 50	19 10	2 27	4 35	1 12	18 40	2 6	13 23	0 25	5 20	1 2	2 42	2 4	18 3	0 15	21 42	1 22	7 36	16 42	14 46	15 12	2 38	15 22	1 57			
S 6	6 28	17 40	1 22	3 48	1 6	18 33	2 1	13 37	0 26	5 15	1 2	2 39	2 4	18 3	0 15	21 42	1 22	7 35	16 42	14 46	15 13	2 40	15 22	1 58			
S 7	6 6	15 22	0 15	3 1	1 0	18 26	1 56	13 51	0 27	5 10	1 2	2 36	2 4	18 4	0 15	21 42	1 21	7 34	16 41	14 46	15 14	2 42	15 21	1 58			
M 8	5 43	12 23	0n52	2 14	0 54	18 18	1 51	14 5	0 27	5 5	1 2	2 33	2 4	18 4	0 15	21 42	1 21	7 33	16 41	14 46	15 15	2 45	15 21	1 58			
T 9	5 21	8 54	1 56	1 28	0 48	18 9	1 46	14 19	0 28	5 0	1 2	2 30	2 4	18 5	0 15	21 42	1 21	7 31	16 41	14 46	15 16	2 47	15 20	1 58			
W10	4 58	5 7	2 54	0 41	0 42	18 0	1 41	14 33	0 29	4 54	1 2	2 27	2 4	18 5	0 15	21 42	1 21	7 30	16 40	14 47	15 17	2 49	15 20	1 58			
T 11	4 35	1 8	3 44	0s 5	0 35	17 50	1 36	14 46	0 29	4 49	1 2	2 24	2 4	18 6	0 15	21 42	1 21	7 29	16 40	14 49	15 18	2 51	15 19	1 59			
F 12	4 12	2s51	4 24	0 50	0 28	17 40	1 31	15 0	0 30	4 44	1 2	2 21	2 4	18 7	0 15	21 43	1 21	7 28	16 40	14 50	15 19	2 53	15 19	1 59			
S 13	3 49	6 43	4 53	1 36	0 21	17 30	1 26	15 13	0 31	4 39	1 2	2 18	2 4	18 7	0 15	21 43	1 21	7 27	16 40	14 52	15 20	2 55	15 18	1 59			
S 14	3 26	10 20	5 9	2 21	0 14	17 19	1 21	15 27	0 31	4 34	1 2	2 16	2 4	18 8	0 15	21 43	1 21	7 26	16 39	14 53	15 21	2 57	15 18	1 59			
M15	3 3	13 34	5 11	3 5	0 7	17 7	1 16	15 40	0 32	4 29	1 2	2 13	2 4	18 8	0 15	21 43	1 21	7 25	16 39	14 55	15 22	2 59	15 17	1 59			
T 16	2 40	16 16	5 0	3 49	0s 1	16 55	1 11	15 53	0 33	4 24	1 2	2 10	2 4	18 9	0 15	21 43	1 21	7 24	16 39	14 56	15 23	3 2	15 17	2 0			
W17	2 17	18 17	4 36	4 33	0 8	16 43	1 6	16 6	0 33	4 19	1 2	2 7	2 4	18 10	0 15	21 43	1 21	7 23	16 39	14 56	15 24	3 4	15 16	2 0			
T 18	1 54	19 29	3 57	5 16	0 16	16 30	1 1	16 19	0 34	4 14	1 2	2 4	2 4	18 10	0 15	21 43	1 21	7 22	16 38	14 56	15 25	3 6	15 15	2 0			
F 19	1 31	19 43	3 6	5 59	0 23	16 16	0 56	16 32	0 34	4 9	1 3	2 1	2 4	18 11	0 15	21 43	1 21	7 21	16 38	14 56	15 26	3 8	15 15	2 0			
S 20	1 7	18 52	2 6	6 41	0 31	16 3	0 52	16 45	0 35	4 4	1 3	1 58	2 4	18 11	0 15	21 43	1 21	7 20	16 38	14 55	15 27	3 10	15 14	2 0			
S 21	0 44	16 53	0 52	7 22	0 38	15 48	0 47	16 57	0 36	3 59	1 3	1 55	2 4	18 12	0 15	21 43	1 21	7 19	16 38	14 55	15 28	3 12	15 14	2 1			
M22	0 21	13 49	0s25	8 3	0 46	15 33	0 42	17 10	0 36	3 53	1 3	1 52	2 4	18 13	0 15	21 43	1 21	7 18	16 38	14 55	15 29	3 14	15 13	2 1			
T 23	0s 3	9 49	1 43	8 44	0 54	15 18	0 38	17 22	0 37	3 48	1 3	1 49	2 4	18 13	0 14	21 44	1 21	7 17	16 37	14 55	15 30	3 16	15 12	2 1			
W24	0 26	5 5	2 55	9 23	1 1	15 2	0 33	17 35	0 38	3 43	1 3	1 46	2 4	18 14	0 14	21 44	1 21	7 16	16 37	14 56	15 31	3 19	15 12	2 1			
T 25	0 50	0n 0	3 56	10 2	1 9	14 46	0 28	17 47	0 38	3 38	1 3	1 43	2 4	18 15	0 14	21 44	1 21	7 15	16 37	14 58	15 32	3 21	15 11	2 1			
F 26	1 13	5 7	4 40	10 40	1 16	14 30	0 24	17 59	0 39	3 33	1 3	1 40	2 4	18 15	0 14	21 44	1 20	7 14	16 37	15 0	15 33	3 23	15 10	2 1			
S 27	1 36	9 51	5 4	11 18	1 24	14 12	0 19	18 11	0 39	3 28	1 3	1 37	2 4	18 16	0 14	21 44	1 20	7 13	16 37	15 2	15 34	3 25	15 10	2 2			
S 28	2 0	13 53	5 7	11 55	1 31	13 55	0 15	18 23	0 40	3 23	1 3	1 35	2 4	18 17	0 14	21 44	1 20	7 12	16 37	15 4	15 35	3 27	15 9	2 2			
M29	2 23	16 59	4 51	12 31	1 38	13 37	0 11	18 34	0 40	3 18	1 3	1 32	2 4	18 18	0 14	21 44	1 20	7 12	16 36	15 5	15 36	3 29	15 8	2 2			
T 30	2s46	18n58	4s17	13s 6	1s46	13n19	0s 6	18s46	0s41	3n13	1n 3	1n29	2n 4	18s18	0n14	21s44	1n20	7n11	16n36	15n 6	15n36	3s31	15n 7	2s 5			

ASTRODIENST EPHEMERIS for the year 1980
geocentric

OCTOBER 1980

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	0 39 31	7♏57°50	6♏16	1♏14	25♏28	22♏4	24♏33	1♏11	23♏6	20♏9	21♏9	19°D 3	17♏23	19♏55	17°R33	W 1
T 2	0 43 27	8°56'51	19°23	2°32	26°37	22°46	24°46	1°18	23°9	20°10	21°11	19°D 4	17°20	20°2	17°R31	T 2
F 3	0 47 24	9°55'55	2♏8	3°47	27°45	23°28	24°58	1°26	23°12	20°11	21°13	19°5	17°17	20°9	17°29	F 3
S 4	0 51 20	10°55'01	14°35	5°2	28°54	24°10	25°11	1°33	23°15	20°12	21°16	19°R 6	17°14	20°15	17°26	S 4
S 5	0 55 17	11°54'10	26°49	6°15	0♏3	24°52	25°24	1°41	23°18	20°13	21°18	19°5	17°10	20°22	17°24	S 5
M 6	0 59 14	12°53'20	8♏53	7°26	1°12	25°34	25°37	1°48	23°21	20°14	21°20	19°3	17°7	20°29	17°22	M 6
T 7	1 3 10	13°52'33	20°50	8°35	2°21	26°16	25°49	1°55	23°24	20°15	21°23	18°59	17°4	20°36	17°19	T 7
W 8	1 7 7	14°51'48	2♏43	9°43	3°30	26°58	26°2	2°3	23°27	20°16	21°25	18°51	17°1	20°42	17°17	W 8
T 9	1 11 3	15°51'05	14°34	10°48	4°39	27°41	26°15	2°10	23°30	20°18	21°28	18°42	16°58	20°49	17°15	T 9
F 10	1 15 0	16°50'24	26°25	11°51	5°49	28°23	26°27	2°17	23°34	20°19	21°30	18°31	16°55	20°56	17°12	F 10
S 11	1 18 56	17°49'45	8♏17	12°52	6°59	29°6	26°40	2°25	23°37	20°20	21°32	18°19	16°51	21°2	17°10	S 11
S 12	1 22 53	18°49'08	20°12	13°50	8°9	29°49	26°52	2°32	23°40	20°21	21°35	18°8	16°48	21°9	17°7	S 12
M13	1 26 49	19°48'33	2♏12	14°45	9°19	0♏31	27°5	2°39	23°43	20°23	21°37	17°58	16°45	21°16	17°5	M13
T 14	1 30 46	20°48'00	14°18	15°37	10°29	1°14	27°17	2°46	23°46	20°24	21°40	17°49	16°42	21°22	17°2	T 14
W15	1 34 42	21°47'28	26°35	16°25	11°39	1°57	27°30	2°54	23°50	20°25	21°42	17°44	16°39	21°29	16°59	W15
T 16	1 38 39	22°46'59	9♏5	17°10	12°50	2°40	27°42	3°1	23°53	20°27	21°44	17°41	16°35	21°36	16°57	T 16
F 17	1 42 36	23°46'31	21°53	17°50	14°0	3°23	27°54	3°8	23°56	20°28	21°47	17°D40	16°32	21°43	16°54	F 17
S 18	1 46 32	24°46'05	5♏2	18°25	15°11	4°6	28°7	3°15	24°0	20°30	21°49	17°40	16°29	21°49	16°51	S 18
S 19	1 50 29	25°45'41	18°37	18°56	16°22	4°49	28°19	3°22	24°3	20°31	21°52	17°R40	16°26	21°56	16°48	S 19
M20	1 54 25	26°45'18	2♏39	19°21	17°33	5°32	28°31	3°29	24°6	20°33	21°54	17°40	16°23	22°3	16°46	M20
T 21	1 58 22	27°44'57	17°9	19°39	18°44	6°16	28°43	3°36	24°10	20°34	21°56	17°37	16°20	22°9	16°43	T 21
W22	2 2 18	28°44'38	2♏4	19°51	19°55	6°59	28°55	3°43	24°13	20°36	21°59	17°31	16°16	22°16	16°40	W22
T 23	2 6 15	29°44'20	17°16	19°R55	21°6	7°42	29°7	3°50	24°17	20°37	22°1	17°23	16°13	22°23	16°37	T 23
F 24	2 10 11	0♏44'05	2♏37	19°52	22°17	8°26	29°19	3°57	24°20	20°39	22°3	17°13	16°10	22°30	16°34	F 24
S 25	2 14 8	1°43'52	17°54	19°40	23°29	9°10	29°31	4°4	24°24	20°40	22°6	17°2	16°7	22°36	16°31	S 25
S 26	2 18 5	2°43'40	2♏56	19°20	24°41	9°53	29°43	4°11	24°27	20°42	22°8	16°52	16°4	22°43	16°29	S 26
M27	2 22 1	3°43'31	17°35	18°50	25°52	10°37	29°55	4°18	24°31	20°44	22°11	16°43	16°1	22°50	16°26	M27
T 28	2 25 58	4°43'24	1♏45	18°11	27°4	11°21	0♏7	4°24	24°34	20°45	22°13	16°37	15°57	22°56	16°23	T 28
W29	2 29 54	5°43'19	15°24	17°23	28°16	12°5	0°19	4°31	24°38	20°47	22°15	16°33	15°54	23°3	16°20	W29
T 30	2 33 51	6°43'17	28°35	16°27	29°28	12°48	0°30	4°38	24°41	20°49	22°18	16°32	15°51	23°10	16°17	T 30
F 31	2 37 47	7♏43'16	11♏20	15♏22	0♏40	13♏32	0♏42	4♏45	24♏45	20♏51	22♏20	16♏32	15♏48	23♏17	16♏14	F 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
W 1	3s10	19n48	3s30	13s40	1s53	13n 0	0s 2	18s57	0s42	3n 8	1n 3	1n26	2n 4	18s19	0n14	21s44
T 2	3 33	19 31	2 33	14 13	2 0	12 41	0n 2	19 9	0 42	3 3	1 3	1 23	2 4	18 20	0 14	21 45
F 3	3 56	18 13	1 30	14 46	2 7	12 21	0 6	19 20	0 43	2 58	1 3	1 20	2 4	18 21	0 14	21 45
S 4	4 19	16 4	0 24	15 17	2 13	12 1	0 10	19 31	0 43	2 53	1 3	1 17	2 4	18 21	0 14	21 45
S 5	4 42	13 14	0n41	15 48	2 20	11 41	0 14	19 41	0 44	2 48	1 3	1 14	2 5	18 22	0 14	21 45
M 6	5 5	9 51	1 44	16 17	2 26	11 20	0 18	19 52	0 44	2 43	1 4	1 11	2 5	18 23	0 14	21 45
T 7	5 28	6 7	2 42	16 46	2 32	10 59	0 22	20 3	0 45	2 38	1 4	1 9	2 5	18 24	0 14	21 45
W 8	5 51	2 9	3 32	17 13	2 38	10 37	0 26	20 13	0 45	2 33	1 4	1 6	2 5	18 24	0 14	21 45
T 9	6 14	1s52	4 12	17 39	2 43	10 16	0 29	20 23	0 46	2 28	1 4	1 3	2 5	18 25	0 14	21 45
F 10	6 37	5 49	4 42	18 3	2 48	9 53	0 33	20 33	0 46	2 23	1 4	1 0	2 5	18 26	0 14	21 46
S 11	7 0	9 33	4 59	18 27	2 53	9 31	0 37	20 43	0 47	2 18	1 4	0 57	2 5	18 27	0 14	21 46
S 12	7 22	12 55	5 3	18 48	2 57	9 8	0 40	20 53	0 47	2 13	1 4	0 54	2 5	18 28	0 14	21 46
M13	7 45	15 48	4 54	19 9	3 1	8 45	0 44	21 2	0 48	2 9	1 4	0 52	2 5	18 29	0 14	21 46
T 14	8 7	18 1	4 32	19 27	3 5	8 22	0 47	21 12	0 48	2 4	1 4	0 49	2 5	18 29	0 14	21 46
W15	8 30	19 27	3 57	19 44	3 7	7 58	0 50	21 21	0 49	1 59	1 4	0 46	2 5	18 30	0 14	21 46
T 16	8 54	19 58	3 10	19 59	3 10	7 34	0 53	21 30	0 49	1 54	1 4	0 43	2 6	18 31	0 14	21 46
F 17	9 12	19 29	2 13	20 12	3 11	7 10	0 56	21 39	0 50	1 49	1 5	0 41	2 6	18 32	0 14	21 47
S 18	9 36	17 56	1 7	20 23	3 12	6 45	0 59	21 47	0 50	1 44	1 5	0 38	2 6	18 33	0 14	21 47
S 19	9 57	15 20	0s 5	20 32	3 12	6 20	1 2	21 56	0 51	1 40	1 5	0 35	2 6	18 34	0 14	21 47
M20	10 19	11 45	1 19	20 38	3 11	5 55	1 5	22 4	0 51	1 35	1 5	0 32	2 6	18 34	0 14	21 47
T 21	10 40	7 22	2 30	20 41	3 9	5 30	1 8	22 12	0 52	1 30	1 5	0 30	2 6	18 35	0 14	21 47
W22	11 2	2 26	3 32	20 41	3 6	5 5	1 11	22 20	0 52	1 25	1 5	0 27	2 6	18 36	0 14	21 47
T 23	11 23	2n45	4 21	20 38	3 2	4 39	1 13	22 28	0 53	1 21	1 5	0 24	2 6	18 37	0 14	21 47
F 24	11 44	7 48	4 52	20 32	2 56	4 13	1 16	22 35	0 53	1 16	1 5	0 22	2 6	18 38	0 14	21 48
S 25	12 5	12 20	5 1	20 22	2 49	3 47	1 18	22 42	0 53	1 11	1 5	0 19	2 7	18 39	0 14	21 48
S 26	12 25	16 0	4 50	20 8	2 40	3 21	1 21	22 49	0 54	1 7	1 5	0 17	2 7	18 40	0 14	21 48
M27	12 46	18 33	4 19	19 49	2 30	2 55	1 23	22 56	0 54	1 2	1 6	0 14	2 7	18 40	0 14	21 48
T 28	13 6	19 52	3 33	19 27	2 18	2 28	1 25	23 3	0 55	0 58	1 6	0 11	2 7	18 41	0 14	21 48
W29	13 26	19 57	2 37	19 0	2 4	2 1	1 27	23 9	0 55	0 53	1 6	0 9	2 7	18 42	0 14	21 48
T 30	13 46	18 55	1 34	18 29	1 48	1 35	1 29	23 15	0 56	0 49	1 6	0 6	2 7	18 43	0 14	21 49
F 31	14s 5	16n56	0s28	17s54	1s31	1n 8	1n31	23s21	0s56	0n44	1n 6	0n 4	2n 7	18s44	0n14	21s49

Julian Day Number = 2444513.5, Delta T = 51.18 sec
Ecliptic obliquity = 23°26'24", Nutation = - 0°00'12", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 24°28'17", Lahiri = 23°35'17"

ASTRODIENST EPHEMERIS for the year 1980
geocentric

NOVEMBER 1980

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 41 44	8♍43'18	23♌44	14°R12	1♌52	14♌16	0♌53	4♌51	24♍49	20♌52	22♌22	16°R32	15♌45	23♌23	16°R11	S 1
S 2	2 45 40	9°43'21	5♍54	12♍56	3° 5	15° 1	1° 5	4°58	24°52	20°54	22°25	16♌31	15°41	23°30	16♌8	S 2
M 3	2 49 37	10°43'27	17°52	11°39	4°17	15°45	1°16	5° 4	24°56	20°56	22°27	16°27	15°38	23°37	16° 5	M 3
T 4	2 53 34	11°43'35	29°45	10°20	5°30	16°29	1°28	5°11	25° 0	20°58	22°29	16°21	15°35	23°43	16° 2	T 4
W 5	2 57 30	12°43'45	11♌35	9° 4	6°42	17°13	1°39	5°17	25° 3	21° 0	22°31	16°12	15°32	23°50	15°59	W 5
T 6	3 1 127	13°43'57	23°25	7°53	7°55	17°58	1°50	5°24	25° 7	21° 2	22°34	16° 0	15°29	23°57	15°56	T 6
F 7	3 5 23	14°44'10	5♍18	6°49	9° 8	18°42	2° 1	5°30	25°11	21° 3	22°36	15°46	15°26	24° 4	15°53	F 7
S 8	3 9 20	15°44'26	17°15	5°53	10°21	19°27	2°12	5°36	25°14	21° 5	22°38	15°31	15°22	24°10	15°50	S 8
S 9	3 13 16	16°44'43	29°17	5° 8	11°33	20°11	2°23	5°43	25°18	21° 7	22°41	15°16	15°19	24°17	15°47	S 9
M10	3 17 13	17°45'02	11♌25	4°34	12°46	20°56	2°34	5°49	25°22	21° 9	22°43	15° 3	15°16	24°24	15°44	M10
T 11	3 21 9	18°45'23	23°41	4°11	14° 0	21°41	2°45	5°55	25°25	21°11	22°45	14°52	15°13	24°30	15°41	T 11
W12	3 25 6	19°45'45	6♌6	4°D 0	15°13	22°26	2°56	6° 1	25°29	21°13	22°47	14°44	15°10	24°37	15°38	W12
T 13	3 29 3	20°46'09	18°42	4° 1	16°26	23°11	3° 6	6° 7	25°33	21°15	22°49	14°39	15° 6	24°44	15°35	T 13
F 14	3 32 59	21°46'34	1♌32	4°12	17°39	23°55	3°17	6°13	25°36	21°17	22°52	14°37	15° 3	24°51	15°32	F 14
S 15	3 36 56	22°47'01	14°39	4°33	18°52	24°40	3°27	6°19	25°40	21°19	22°54	14°37	15° 0	24°57	15°29	S 15
S 16	3 40 52	23°47'28	28° 6	5° 4	20° 6	25°25	3°38	6°25	25°44	21°21	22°56	14°37	14°57	25° 4	15°26	S 16
M17	3 44 49	24°47'57	11♌56	5°43	21°19	26°11	3°48	6°31	25°48	21°23	22°58	14°36	14°54	25°11	15°23	M17
T 18	3 48 45	25°48'27	26°10	6°30	22°33	26°56	3°58	6°36	25°51	21°25	23° 0	14°33	14°51	25°17	15°20	T 18
W19	3 52 42	26°48'59	10♌47	7°23	23°46	27°41	4° 8	6°42	25°55	21°28	23° 2	14°28	14°47	25°24	15°17	W19
T 20	3 56 38	27°49'31	25°42	8°22	25° 0	28°26	4°18	6°48	25°59	21°30	23° 4	14°19	14°44	25°31	15°14	T 20
F 21	4 0 35	28°50'05	10♌49	9°26	26°14	29°11	4°28	6°53	26° 3	21°32	23° 6	14° 9	14°41	25°38	15°11	F 21
S 22	4 4 32	29°50'41	25°57	10°34	27°27	29°57	4°38	6°59	26° 6	21°34	23° 8	13°58	14°38	25°44	15° 8	S 22
S 23	4 8 28	0♌51'18	10♌56	11°46	28°41	0♌42	4°48	7° 4	26°10	21°36	23°10	13°47	14°35	25°51	15° 5	S 23
M24	4 12 25	1°51'56	25°37	13° 2	29°55	1°28	4°57	7° 9	26°14	21°38	23°12	13°38	14°32	25°58	15° 2	M24
T25	4 16 21	2°52'36	9♌52	14°20	1♍9	2°13	5° 7	7°15	26°17	21°40	23°14	13°31	14°28	26° 4	14°59	T25
W26	4 20 18	3°53'18	23°38	15°40	2°23	2°59	5°16	7°20	26°21	21°43	23°16	13°27	14°25	26°11	14°56	W26
T 27	4 24 14	4°54'01	6♌56	17° 3	3°37	3°44	5°26	7°25	26°25	21°45	23°18	13°26	14°22	26°18	14°54	T 27
F 28	4 28 11	5°54'45	19°47	18°27	4°51	4°30	5°35	7°30	26°29	21°47	23°20	13°D25	14°19	26°25	14°51	F 28
S 29	4 32 7	6°55'31	2♍15	19°52	6° 5	5°16	5°44	7°35	26°32	21°49	23°22	13°R26	14°16	26°31	14°48	S 29
S 30	4 36 4	7♌56'19	14♍26	21♍19	7♍19	6♌2	5♌53	7♌40	26♍36	21♌51	23♌24	13♌26	14♌12	26♌38	14♌45	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
S 1	14s25	14n12	0n38	17s15	1s12	0n41	1n33	23s27	0s56	0n40	1n 6	0n 1	2n 8	18s45	0n14	21s49	1n19	6n44	16n37	15n53	16n 7	4s40	14n39	2s 7			
S 2	14 44	10 54	1 41	16 34	0 53	0 13	1 35	23 32	0 57	0 35	1 6	0s 1	2 8	18 46	0 14	21 49	1 19	6 43	16 37	15 53	16 8	4 42	14 39	2 7			
M 3	15 3	7 13	2 38	15 50	0 32	0s14	1 36	23 37	0 57	0 31	1 7	0 4	2 8	18 47	0 14	21 49	1 19	6 43	16 37	15 54	16 9	4 44	14 38	2 7			
T 4	15 21	3 16	3 27	15 6	0 12	0 41	1 38	23 42	0 57	0 26	1 7	0 6	2 8	18 47	0 14	21 49	1 19	6 42	16 37	15 56	16 10	4 46	14 37	2 7			
W 5	15 40	0s47	4 7	14 23	0n 9	1 9	1 39	23 47	0 58	0 22	1 7	0 8	2 8	18 48	0 14	21 49	1 19	6 41	16 37	15 59	16 11	4 48	14 36	2 7			
T 6	15 58	4 48	4 37	13 41	0 29	1 36	1 41	23 52	0 58	0 18	1 7	0 11	2 8	18 49	0 14	21 50	1 19	6 41	16 38	16 3	16 12	4 50	14 35	2 7			
F 7	16 16	8 40	4 54	13 2	0 48	2 3	1 42	23 56	0 59	0 13	1 7	0 13	2 8	18 50	0 14	21 50	1 19	6 40	16 38	16 7	16 13	4 52	14 34	2 7			
S 8	16 33	12 12	4 59	12 27	1 5	2 31	1 43	24 0	0 59	0 9	1 7	0 16	2 9	18 51	0 14	21 50	1 19	6 39	16 38	16 11	16 14	4 54	14 33	2 7			
S 9	16 50	15 16	4 50	11 57	1 21	2 58	1 44	24 4	0 59	0 5	1 7	0 18	2 9	18 52	0 14	21 50	1 19	6 39	16 38	16 16	16 15	4 57	14 32	2 7			
M10	17 7	17 43	4 29	11 33	1 36	3 26	1 45	24 7	1 0	0 1	1 8	0 20	2 9	18 53	0 14	21 50	1 19	6 38	16 38	16 19	16 15	4 59	14 31	2 7			
T 11	17 24	19 23	3 54	11 13	1 48	3 53	1 46	24 10	1 0	0s 3	1 8	0 22	2 9	18 54	0 14	21 50	1 19	6 38	16 39	16 23	16 16	5 1	14 30	2 8			
W12	17 41	20 10	3 8	11 0	1 58	4 21	1 47	24 13	1 0	0 8	1 8	0 25	2 9	18 55	0 14	21 51	1 19	6 37	16 39	16 25	16 17	5 3	14 29	2 8			
T 13	17 57	19 57	2 12	10 52	2 6	4 48	1 48	24 16	1 1	0 12	1 8	0 27	2 9	18 56	0 14	21 51	1 18	6 37	16 39	16 26	16 18	5 5	14 28	2 8			
F 14	18 13	18 42	1 9	10 50	2 13	5 16	1 48	24 19	1 1	0 16	1 8	0 29	2 10	18 56	0 14	21 51	1 18	6 36	16 39	16 27	16 19	5 7	14 27	2 8			
S 15	18 28	16 27	0s 0	10 53	2 18	5 43	1 49	24 21	1 1	0 20	1 8	0 31	2 10	18 57	0 14	21 51	1 18	6 36	16 40	16 27	16 20	5 9	14 26	2 8			
S 16	18 43	13 14	1 11	11 0	2 21	6 10	1 49	24 23	1 1	0 24	1 8	0 33	2 10	18 58	0 14	21 51	1 18	6 35	16 40	16 27	16 21	5 12	14 25	2 8			
M17	18 58	9 14	2 19	11 11	2 23	6 37	1 50	24 25	1 2	0 28	1 9	0 35	2 10	18 59	0 14	21 51	1 18	6 35	16 40	16 27	16 22	5 14	14 24	2 8			
T 18	19 13	4 36	3 21	11 25	2 24	7 4	1 50	24 26	1 2	0 32	1 9	0 38	2 10	19 0	0 14	21 52	1 18	6 34	16 41	16 28	16 23	5 16	14 23	2 8			
W19	19 27	0n25	4 11	11 43	2 23	7 31	1 50	24 27	1 2	0 35	1 9	0 40	2 11	19 1	0 14	21 52	1 18	6 34	16 41	16 30	16 24	5 18	14 23	2 8			
T 20	19 41	5 30	4 46	12 4	2 21	7 58	1 50	24 28	1 3	0 39	1 9	0 42	2 11	19 2	0 14	21 52	1 18	6 33	16 41	16 32	16 25	5 20	14 22	2 8			
F 21	19 54	10 18	5 1	12 26	2 19	8 25	1 50	24 29	1 3	0 43	1 9	0 44	2 11	19 3	0 14	21 52	1 18	6 33	16 41	16 35	16 26	5 22	14 21	2 8			
S 22	20 7	14 28	4 55	12 51	2 16	8 51	1 50	24 29	1 3	0 47	1 10	0 46	2 11	19 4	0 14	21 52	1 18	6 32	16 42	16 38	16 27	5 24	14 20	2 8			
S 23	20 20	17 39	4 28	13 16	2 12	9 18	1 50	24 30	1 3	0 50	1 10	0 48	2 11	19 4	0 14	21 52	1 18	6 32	16 42	16 41	16 28	5 27	14 19	2 8			
M24	20 32	19 37	3 45	13 43	2 7	9 44	1 50	24 29	1 4	0 54	1 10	0 49	2 12	19 5	0 14	21 53	1 18	6 32	16 42	16 44	16 28	5 29	14 18	2 8			
T25	20 44	20 17	2 48	14 11	2 2	10 10	1 50	24 29	1 4	0 58	1 10	0 51	2 12	19 6	0 14	21 53	1 18	6 31	16 43	16 46	16 29	5 31	14 17	2 8			
W26	20 56	19 41	1 43	14 40	1 57	10 36	1 49	24 28	1 4	1 1	1 10	0 53	2 12	19 7	0 14	21 53	1 18	6 31	16 43	16 47	16 30	5 33	14 16	2 8			
T 27	21 7	17 59	0 34	15 9	1 51	11 1	1 49	24 27	1 4	1 5	1 10	0 55	2 12	19 8	0 14	21 53	1 18	6 31	16 44	16 48	16 31	5 35	14 15	2 8			
F 28	21 18	15 25	0n34	15 38	1 45	11 26	1 48	24 26	1 4	1 8	1 11	0 57	2 13	19 9	0 14	21 53	1 18	6 30	16 44	16 48	16 32	5 37	14 15	2 9			
S 29	21 28	12 12	1 39	16 7	1 39	11 52	1 48	24 25	1 5	1 12	1 11	0 59	2 13	19 10	0 14	21 53	1 18	6 30	16 44	16 47	16 33	5 39	14 14	2 9			
S 30	21s38	8n33	2n37	16s37	1n32	12s16	1n47	24s23	1s 5	1s15	1n11	1s 0	2n13	19s10	0n14	21s53	1n18	6n30	16n45	16n47	16n34	5s42	14n13	2s 9			

ASTRODIENST EPHEMERIS for the year 1980

geocentric

DECEMBER 1980

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	4 40 1	8♂57'07	26♂25	22♂47	8♂34	6♂47	6♂2	7♂45	26♂40	21♂54	23♂26	13°R24	14♂9	26♂45	14°R43	M 1
T 2	4 43 57	9°57'58	8♂17	24°16	9°48	7°33	6°11	7°49	26°43	21°56	23°27	13♂20	14°6	26°51	14♂40	T 2
W 3	4 47 54	10°58'50	20°7	25°45	11°2	8°19	6°19	7°54	26°47	21°58	23°29	13°13	14°3	26°58	14°37	W 3
T 4	4 51 50	11°59'43	1♂59	27°15	12°16	9°5	6°28	7°59	26°51	22°0	23°31	13°4	14°0	27°5	14°35	T 4
F 5	4 55 47	13° 0'37	13°55	28°45	13°31	9°51	6°36	8°3	26°54	22°2	23°33	12°53	13°57	27°12	14°32	F 5
S 6	4 59 43	14° 1'33	25°58	0♂16	14°45	10°37	6°44	8°7	26°58	22°5	23°34	12°41	13°53	27°18	14°30	S 6
S 7	5 3 40	15° 2'29	8♂10	1°47	16°0	11°24	6°53	8°12	27°1	22°7	23°36	12°30	13°50	27°25	14°27	S 7
M 8	5 7 36	16° 3'27	20°31	3°19	17°14	12°10	7°1	8°16	27°5	22°9	23°38	12°19	13°47	27°32	14°25	M 8
T 9	5 11 33	17° 4'26	3♂3	4°51	18°29	12°56	7°8	8°20	27°8	22°11	23°39	12°11	13°44	27°38	14°22	T 9
W10	5 15 30	18° 5'25	15°44	6°23	19°43	13°42	7°16	8°24	27°12	22°14	23°41	12°5	13°41	27°45	14°20	W10
T 11	5 19 26	19° 6'25	28°36	7°55	20°58	14°29	7°24	8°28	27°16	22°16	23°43	12°2	13°38	27°52	14°17	T 11
F 12	5 23 23	20° 7'26	11♂39	9°27	22°12	15°15	7°31	8°32	27°19	22°18	23°44	12°D 1	13°34	27°59	14°15	F 12
S 13	5 27 19	21° 8'28	24°56	11°0	23°27	16°1	7°39	8°36	27°23	22°21	23°46	12°1	13°31	28°5	14°13	S 13
S 14	5 31 16	22° 9'30	8♂27	12°32	24°41	16°48	7°46	8°40	27°26	22°23	23°47	12°2	13°28	28°12	14°11	S 14
M15	5 35 12	23°10'32	22°13	14°5	25°56	17°34	7°53	8°43	27°30	22°25	23°49	12°R 3	13°25	28°19	14°8	M15
T 16	5 39 9	24°11'35	6♂16	15°38	27°11	18°21	8°0	8°47	27°33	22°27	23°50	12°2	13°22	28°25	14°6	T 16
W17	5 43 5	25°12'38	20°34	17°11	28°26	19°7	8°7	8°50	27°36	22°30	23°52	12°0	13°18	28°32	14°4	W17
T 18	5 47 2	26°13'41	5♂6	18°44	29°40	19°54	8°13	8°54	27°40	22°32	23°53	11°55	13°15	28°39	14°2	T 18
F 19	5 50 59	27°14'45	19°47	20°17	0♂55	20°41	8°20	8°57	27°43	22°34	23°54	11°49	13°12	28°46	14°0	F 19
S 20	5 54 55	28°15'49	4♂30	21°51	2°10	21°27	8°26	9°0	27°47	22°36	23°56	11°42	13°9	28°52	13°58	S 20
S 21	5 58 52	29°16'54	19°8	23°25	3°25	22°14	8°32	9°3	27°50	22°39	23°57	11°35	13°6	28°59	13°56	S 21
M22	6 2 48	0♂17'59	3♂33	24°58	4°39	23°1	8°39	9°6	27°53	22°41	23°58	11°29	13°3	29°6	13°54	M22
T 23	6 6 45	1°19'05	17°39	26°32	5°54	23°48	8°44	9°9	27°56	22°43	23°59	11°24	12°59	29°13	13°52	T 23
W24	6 10 41	2°20'11	1♂23	28°7	7°9	24°34	8°50	9°12	28°0	22°45	24°1	11°22	12°56	29°19	13°51	W24
T 25	6 14 38	3°21'17	14°41	29°41	8°24	25°21	8°56	9°14	28°3	22°48	24°2	11°D22	12°53	29°26	13°49	T 25
F 26	6 18 34	4°22'24	27°36	1♂16	9°39	26°8	9°1	9°17	28°6	22°50	24°3	11°23	12°50	29°33	13°47	F 26
S 27	6 22 31	5°23'32	10♂9	2°51	10°54	26°55	9°6	9°19	28°9	22°52	24°4	11°24	12°47	29°39	13°46	S 27
S 28	6 26 28	6°24'40	22°25	4°26	12°9	27°42	9°12	9°22	28°12	22°54	24°5	11°26	12°44	29°46	13°44	S 28
M29	6 30 24	7°25'48	4♂27	6°1	13°23	28°29	9°17	9°24	28°16	22°57	24°6	11°R27	12°40	29°53	13°43	M29
T 30	6 34 21	8°26'57	16°22	7°37	14°38	29°16	9°21	9°26	28°19	22°59	24°7	11°27	12°37	29°59	13°41	T 30
W31	6 38 17	9♂28'07	28♂13	9♂13	15♂53	0♂3	9♂26	9♂28	28♂22	23♂1	24♂8	11♂25	12♂34	0♂6	13♂40	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
M 1	21s48	4n36	3n28	17s6	1n25	12s41	1n46	24s21	1s5	1s18	1n11	1s2	2n13	19s11	0n14	21s54
T 2	21 57	0 32	4 9	17 34	1 18	13 5	1 45	24 19	1 5	1 22	1 11	1 4	2 13	19 12	0 14	21 54
W 3	22 5	3s33	4 40	18 3	1 11	13 29	1 44	24 16	1 5	1 25	1 12	1 5	2 14	19 13	0 14	21 54
T 4	22 14	7 30	4 58	18 30	1 4	13 53	1 43	24 13	1 6	1 28	1 12	1 7	2 14	19 14	0 14	21 54
F 5	22 22	11 11	5 3	18 58	0 57	14 16	1 42	24 10	1 6	1 31	1 12	1 8	2 14	19 15	0 14	21 54
S 6	22 29	14 28	4 56	19 24	0 50	14 39	1 41	24 7	1 6	1 34	1 12	1 10	2 14	19 16	0 14	21 54
S 7	22 36	17 10	4 34	19 50	0 42	15 2	1 40	24 3	1 6	1 37	1 12	1 11	2 15	19 16	0 14	21 54
M 8	22 43	19 7	4 0	20 15	0 35	15 24	1 39	23 59	1 6	1 40	1 13	1 13	2 15	19 17	0 14	21 55
T 9	22 49	20 11	3 13	20 39	0 28	15 46	1 37	23 55	1 6	1 43	1 13	1 14	2 15	19 18	0 14	21 55
W10	22 54	20 16	2 16	21 2	0 20	16 8	1 36	23 50	1 7	1 46	1 13	1 16	2 15	19 19	0 14	21 55
T 11	23 0	19 17	1 11	21 25	0 13	16 29	1 34	23 45	1 7	1 49	1 13	1 17	2 16	19 20	0 14	21 55
F 12	23 4	17 16	0 2	21 46	0 6	16 50	1 33	23 40	1 7	1 52	1 14	1 18	2 16	19 20	0 14	21 55
S 13	23 9	14 18	1s9	22 6	0s1	17 10	1 31	23 35	1 7	1 54	1 14	1 19	2 16	19 21	0 14	21 55
S 14	23 12	10 32	2 17	22 26	0 8	17 30	1 30	23 30	1 7	1 57	1 14	1 21	2 16	19 22	0 14	21 55
M15	23 16	6 8	3 19	22 44	0 15	17 49	1 28	23 24	1 7	1 59	1 14	1 22	2 17	19 23	0 14	21 56
T 16	23 19	1 21	4 10	23 1	0 21	18 8	1 26	23 18	1 7	2 2	1 14	1 23	2 17	19 24	0 14	21 56
W17	23 21	3n36	4 47	23 17	0 28	18 26	1 24	23 11	1 7	2 4	1 15	1 24	2 17	19 24	0 14	21 56
T 18	23 23	8 25	5 6	23 32	0 35	18 44	1 22	23 5	1 7	2 7	1 15	1 25	2 17	19 25	0 14	21 56
F 19	23 25	12 47	5 5	23 46	0 41	19 2	1 20	22 58	1 7	2 9	1 15	1 26	2 18	19 26	0 14	21 56
S 20	23 26	16 23	4 44	23 58	0 47	19 19	1 18	22 50	1 8	2 11	1 15	1 27	2 18	19 27	0 14	21 56
S 21	23 26	18 55	4 5	24 10	0 53	19 35	1 16	22 43	1 8	2 14	1 16	1 28	2 18	19 27	0 14	21 56
M22	23 26	20 13	3 10	24 20	0 59	19 51	1 14	22 35	1 8	2 16	1 16	1 29	2 18	19 28	0 13	21 56
T 23	23 26	20 12	2 5	24 29	1 5	20 6	1 12	22 27	1 8	2 18	1 16	1 30	2 19	19 29	0 13	21 57
W24	23 25	18 58	0 54	24 36	1 10	20 21	1 10	22 19	1 8	2 20	1 16	1 31	2 19	19 30	0 13	21 57
T 25	23 24	16 43	0n18	24 42	1 16	20 35	1 8	22 11	1 8	2 22	1 17	1 32	2 19	19 30	0 13	21 57
F 26	23 22	13 40	1 27	24 47	1 21	20 49	1 6	22 2	1 8	2 24	1 17	1 32	2 20	19 31	0 13	21 57
S 27	23 20	10 5	2 30	24 50	1 26	21 2	1 3	21 53	1 8	2 26	1 17	1 33	2 20	19 32	0 13	21 57
S 28	23 17	6 9	3 25	24 53	1 31	21 14	1 1	21 44	1 8	2 27	1 17	1 34	2 20	19 33	0 13	21 57
M29	23 14	2 3	4 10	24 53	1 35	21 26	0 59	21 34	1 8	2 29	1 18	1 34	2 20	19 33	0 13	21 57
T 30	23 10	2s5	4 43	24 52	1 39	21 37	0 56	21 25	1 8	2 31	1 18	1 35	2 21	19 34	0 13	21 57
W31	23s6	6s6	5n4	24s50	1s43	21s48	0n54	21s15	1s8	2s32	1n18	1s36	2n21	19s35	0n13	21s58

Julian Day Number = 2444574.5, Delta T = 51.31 sec
 Ecliptic obliquity = 23°26'24", Nutation = - 0°00'13", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 24°28'25", Lahiri = 23°35'26"