



Astrodienst Ephemeris Tables for the year 1981

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 1981

geocentric

JANUARY 1981

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	6 42 14	10°32'17	10♈ 6	10°35'0	17°28' 8	0°50	9°30	9°30	28°25	23°37 3	24°19 9	11°R22	12°231	0°13	13°R38	T 1
F 2	6 46 10	11°30'27	22° 5	12°27	18°23	1°37	9°35	9°32	28°28	23° 5	24°10	11°217	12°28	0°20	13°37	F 2
S 3	6 50 7	12°31'37	4°13	14° 4	19°38	2°24	9°39	9°34	28°31	23° 8	24°11	11°12	12°24	0°26	13°36	S 3
S 4	6 54 3	13°32'48	16°33	15°41	20°53	3°11	9°43	9°35	28°34	23°10	24°12	11° 7	12°21	0°33	13°35	S 4
M 5	6 58 0	14°33'58	29° 7	17°19	22° 8	3°58	9°46	9°37	28°36	23°12	24°12	11° 2	12°18	0°40	13°34	M 5
T 6	7 1 57	15°35'09	11°354	18°57	23°23	4°46	9°50	9°38	28°39	23°14	24°13	10°59	12°15	0°47	13°33	T 6
W 7	7 5 53	16°36'20	24°56	20°36	24°38	5°33	9°53	9°40	28°42	23°16	24°14	10°56	12°12	0°53	13°32	W 7
T 8	7 9 50	17°37'30	8°12	22°15	25°54	6°20	9°57	9°41	28°45	23°18	24°15	10°D56	12° 9	1° 0	13°31	T 8
F 9	7 13 46	18°38'40	21°40	23°54	27° 9	7° 7	10° 0	9°42	28°48	23°20	24°15	10°56	12° 5	1° 7	13°30	F 9
S 10	7 17 43	19°39'50	5°19	25°34	28°24	7°55	10° 3	9°43	28°50	23°22	24°16	10°57	12° 2	1°13	13°29	S 10
S 11	7 21 39	20°40'59	19° 7	27°14	29°39	8°42	10° 5	9°44	28°53	23°24	24°16	10°58	11°59	1°20	13°28	S 11
M12	7 25 36	21°42'07	3°5	28°54	0°54	9°29	10° 8	9°45	28°56	23°27	24°17	11° 0	11°56	1°27	13°28	M12
T 13	7 29 33	22°43'15	17° 9	0°34	2° 9	10°17	10°10	9°45	28°58	23°29	24°17	11°R 1	11°53	1°34	13°27	T 13
W14	7 33 29	23°44'22	1°20	2°15	3°24	11° 4	10°12	9°46	29° 1	23°31	24°18	11° 0	11°50	1°40	13°26	W14
T 15	7 37 26	24°45'29	15°34	3°56	4°39	11°51	10°14	9°46	29° 3	23°33	24°18	11° 0	11°46	1°47	13°26	T 15
F 16	7 41 22	25°46'35	29°50	5°37	5°54	12°39	10°16	9°47	29° 6	23°35	24°19	10°58	11°43	1°54	13°25	F 16
S 17	7 45 19	26°47'40	14°3	7°19	7° 9	13°26	10°18	9°47	29° 8	23°37	24°19	10°56	11°40	2° 1	13°25	S 17
S 18	7 49 15	27°48'44	28°10	9° 0	8°24	14°13	10°19	9°47	29°10	23°39	24°19	10°54	11°37	2° 7	13°25	S 18
M19	7 53 12	28°49'48	12°8	10°41	9°39	15° 1	10°20	9°R47	29°13	23°41	24°20	10°53	11°34	2°14	13°24	M19
T 20	7 57 8	29°50'51	25°51	12°21	10°54	15°48	10°21	9°47	29°15	23°42	24°20	10°52	11°30	2°21	13°24	T 20
W21	8 1 5	0°51'53	9°18	14° 2	12° 9	16°36	10°22	9°47	29°17	23°44	24°20	10°D51	11°27	2°27	13°24	W21
T 22	8 5 2	1°52'55	22°27	15°41	13°25	17°23	10°23	9°46	29°20	23°46	24°20	10°52	11°24	2°34	13°24	T 22
F 23	8 8 58	2°53'55	5°18	17°19	14°40	18°10	10°23	9°46	29°22	23°48	24°21	10°52	11°21	2°41	13°D24	F 23
S 24	8 12 55	3°54'56	17°50	18°57	15°55	18°58	10°23	9°46	29°24	23°50	24°21	10°53	11°18	2°48	13°24	S 24
S 25	8 16 51	4°55'55	0°8	20°32	17°10	19°45	10°R23	9°45	29°26	23°52	24°21	10°54	11°15	2°54	13°24	S 25
M26	8 20 48	5°56'54	12°13	22° 6	18°25	20°33	10°23	9°44	29°28	23°54	24°21	10°54	11°11	3° 1	13°24	M26
T 27	8 24 44	6°57'53	24° 9	23°37	19°40	21°20	10°23	9°43	29°30	23°55	24°R21	10°55	11° 8	3° 8	13°25	T 27
W28	8 28 41	7°58'51	6°2	25° 6	20°55	22° 8	10°22	9°42	29°32	23°57	24°21	10°R55	11° 5	3°14	13°25	W28
T 29	8 32 37	8°59'48	17°55	26°31	22°10	22°55	10°22	9°41	29°34	23°59	24°21	10°55	11° 2	3°21	13°25	T 29
F 30	8 36 34	10° 0'45	29°54	27°52	23°25	23°43	10°21	9°40	29°35	24° 1	24°21	10°55	10°59	3°28	13°26	F 30
S 31	8 40 31	11°1'41	12°3	29°8	24°340	24°30	10°20	9°39	29°37	24°2	24°20	10°D55	10°56	3°35	13°26	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
T 1	23s 2	9s54	5n12	24s47	1s47	21s58	0n52	21s 4	1s 8	2s34	1n18	1s36	2n21	19s35	0n13	21s58	1n18	6n28	17n 0	17n22	17n 3	6s50	13n53	2s 9			
F 2	22 56	13 21	5 7	24 42	1 51	22 7	0 49	20 54	1 8	2 35	1 19	1 36	2 22	19 36	0 13	21 58	1 18	6 28	17 1	17 24	17 4	6 52	13 53	2 9			
S 3	22 51	16 16	4 48	24 35	1 54	22 16	0 47	20 43	1 8	2 37	1 19	1 37	2 22	19 37	0 13	21 58	1 18	6 29	17 1	17 25	17 5	6 54	13 53	2 9			
S 4	22 45	18 32	4 15	24 27	1 57	22 23	0 44	20 33	1 8	2 38	1 19	1 37	2 22	19 37	0 13	21 58	1 18	6 29	17 2	17 26	17 6	6 57	13 52	2 8			
M 5	22 39	19 57	3 30	24 17	1 59	22 31	0 42	20 21	1 8	2 39	1 19	1 38	2 22	19 38	0 13	21 58	1 18	6 29	17 2	17 28	17 7	6 59	13 52	2 8			
T 6	22 32	20 22	2 33	24 6	2 1	22 37	0 39	20 10	1 8	2 40	1 20	1 38	2 23	19 38	0 13	21 58	1 18	6 29	17 3	17 29	17 7	7 1	13 52	2 8			
W 7	22 24	19 43	1 27	23 54	2 3	22 43	0 37	19 58	1 8	2 42	1 20	1 38	2 23	19 39	0 13	21 58	1 18	6 30	17 4	17 29	17 8	7 3	13 51	2 8			
T 8	22 17	17 59	0 15	23 39	2 5	22 49	0 34	19 47	1 7	2 43	1 20	1 38	2 23	19 40	0 13	21 58	1 18	6 30	17 4	17 29	17 9	7 5	13 51	2 8			
F 9	22 9	15 13	0s59	23 24	2 6	22 53	0 31	19 35	1 7	2 44	1 20	1 39	2 24	19 40	0 13	21 58	1 18	6 30	17 5	17 29	17 10	7 7	13 51	2 8			
S 10	22 0	11 35	2 10	23 6	2 7	22 57	0 29	19 22	1 7	2 44	1 21	1 39	2 24	19 41	0 13	21 59	1 18	6 30	17 5	17 29	17 11	7 9	13 51	2 8			
S 11	21 51	7 18	3 15	22 47	2 7	23 0	0 26	19 10	1 7	2 45	1 21	1 39	2 24	19 41	0 13	21 59	1 18	6 31	17 6	17 29	17 12	7 12	13 51	2 8			
M12	21 41	2 35	4 9	22 27	2 7	23 3	0 24	18 57	1 7	2 46	1 21	1 39	2 24	19 42	0 13	21 59	1 18	6 31	17 6	17 28	17 13	7 14	13 50	2 8			
T 13	21 32	2n17	4 49	22 5	2 6	23 4	0 21	18 45	1 7	2 47	1 22	1 39	2 25	19 43	0 13	21 59	1 18	6 32	17 7	17 28	17 14	7 16	13 50	2 8			
W14	21 21	7 4	5 11	21 41	2 5	23 5	0 18	18 31	1 7	2 47	1 22	1 39	2 25	19 43	0 13	21 59	1 18	6 32	17 8	17 28	17 15	7 18	13 50	2 8			
T 15	21 11	11 29	5 15	21 16	2 4	23 6	0 16	18 18	1 7	2 48	1 22	1 39	2 25	19 44	0 13	21 59	1 18	6 32	17 8	17 28	17 15	7 20	13 50	2 8			
F 16	20 59	15 15	4 59	20 50	2 2	23 5	0 13	18 5	1 7	2 48	1 22	1 39	2 26	19 44	0 13	21 59	1 18	6 33	17 9	17 29	17 16	7 22	13 50	2 8			
S 17	20 48	18 6	4 25	20 22	1 59	23 4	0 11	17 51	1 7	2 49	1 23	1 38	2 26	19 45	0 13	21 59	1 18	6 33	17 9	17 29	17 17	7 24	13 50	2 8			
S 18	20 36	19 51	3 35	19 52	1 56	23 2	0 8	17 37	1 6	2 49	1 23	1 38	2 26	19 45	0 13	21 59	1 18	6 34	17 10	17 30	17 18	7 26	13 50	2 8			
M19	20 24	20 21	2 32	19 21	1 52	23 0	0 5	17 23	1 6	2 49	1 23	1 38	2 26	19 46	0 13	21 59	1 18	6 34	17 10	17 30	17 19	7 29	13 50	2 8			
T 20	20 11	19 38	1 22	18 49	1 47	22 57	0 3	17 9	1 6	2 49	1 23	1 38	2 27	19 46	0 13	21 59	1 18	6 34	17 11	17 30	17 20	7 31	13 50	2 8			
W21	19 58	17 47	0 9	18 15	1 42	22 53	0 0	16 55	1 6	2 49	1 24	1 37	2 27	19 47	0 13	21 59	1 18	6 35	17 12	17 31	17 21	7 33	13 50	2 8			
T 22	19 44	15 2	1n 4	17 40	1 36	22 48	0s 2	16 40	1 6	2 49	1 24	1 37	2 27	19 47	0 13	22 0	1 18	6 35	17 12	17 31	17 22	7 35	13 50	2 8			
F 23	19 31	11 36	2 11	17 4	1 29	22 43	0 5	16 25	1 6	2 49	1 24	1 36	2 28	19 48	0 13	22 0	1 18	6 36	17 13	17 30	17 22	7 37	13 50	2 8			
S 24	19 17	7 44	3 11	16 27	1 22	22 37	0 8	16 10	1 5	2 49	1 25	1 36	2 28	19 48	0 13	22 0	1 18	6 36	17 13	17 30	17 23	7 39	13 50	2 8			
S 25	19 2	3 38	4 0	15 49	1 14	22 30	0 10	15 55	1 5	2 49	1 25	1 36	2 28	19 49	0 13	22 0	1 18	6 37	17 14	17 30	17 24	7 41	13 50	2 8			
M26	18 47	0s33	4 38	15 10	1 5	22 23	0 13	15 40	1 5	2 48	1 25	1 35	2 28	19 49	0 13	22 0	1 18	6 37	17 15	17 30	17 25	7 44	13 50	2 8			
T 27	18 32	4 39	5 4	14 31	0 55	22 15	0 15	15 25	1 5	2 48	1 25	1 34	2 29	19 49	0 13	22 0	1 18	6 38	17 15	17 30	17 26	7 46	13 50	2 8			
W28	18 16	8 33	5 16	13 51	0 44	22 6	0 18	15 9	1 5	2 48	1 26	1 34	2 29	19 50	0 13	22 0	1 18	6 38	17 16	17 30	17 27	7 48	13 50	2 7			
T 29	18 0	12 8	5 15	13 12	0 33	21 57	0 20	14 53	1 4	2 47	1 26	1 33	2 29	19 50	0 13	22 0	1 18	6 39	17 16	17 30	17 28	7 50	13 51	2 7			
F 30	17 44	15 14	5 0	12 32	0 21	21 47	0 22	14 38	1 4	2 47	1 26	1 32	2 29	19 51	0 14	22 0	1 18	6 40	17 17	17 30	17 29	7 52	13 51	2 7			
S 31	17s28	17s45	4n32	11s54	0s 7	21s36	0s25	14s22	1s 4	2s46	1n26	1s32	2n30	19s51	0n14	22s 0	1n18	6n40	17n17	17n30	17n29	7s54	13n51	2s 9			

ASTRODIENST EPHEMERIS for the year 1981
geocentric

MARCH 1981

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 34 51	10♈19'00	2♊12	19°R56	0♈56	17♈24	8°R30	8°R21	0♈6	24♈40	24°R 2	10♈34	9♈23	6♈50	14♈7	S 1
M 2	10 38 47	11°19'13	14°51	19°D51	2°11	18°11	8♈24	8♈18	0°6	24°41	24♈1	10°35	9°20	6°56	14°9	M 2
T 3	10 42 44	12°19'24	27°53	19°552	3°26	18°58	8°18	8°14	0°7	24°42	24°0	10°37	9°17	7°3	14°11	T 3
W 4	10 46 40	13°19'34	11♈19	20°0	4°41	19°45	8°12	8°10	0°7	24°42	23°58	10°R38	9°14	7°10	14°13	W 4
T 5	10 50 37	14°19'43	25°10	20°14	5°56	20°32	8°5	8°6	0°R 7	24°43	23°57	10°37	9°11	7°17	14°16	T 5
F 6	10 54 33	15°19'49	9♈25	20°33	7°11	21°19	7°59	8°2	0°7	24°44	23°56	10°34	9°7	7°23	14°18	F 6
S 7	10 58 30	16°19'54	23°59	20°57	8°25	22°6	7°52	7°57	0°7	24°45	23°55	10°30	9°4	7°30	14°21	S 7
S 8	11 2 26	17°19'56	8♈45	21°27	9°40	22°53	7°45	7°53	0°6	24°45	23°54	10°25	9°1	7°37	14°23	S 8
M 9	11 6 23	18°19'57	23°36	22°0	10°55	23°40	7°38	7°49	0°6	24°46	23°52	10°19	8°58	7°43	14°26	M 9
T 10	11 10 20	19°19'56	8♈23	22°39	12°10	24°27	7°31	7°45	0°6	24°47	23°51	10°13	8°55	7°50	14°28	T 10
W11	11 14 16	20°19'52	22°58	23°21	13°25	25°14	7°24	7°40	0°6	24°47	23°50	10°9	8°52	7°57	14°31	W11
T 12	11 18 13	21°19'47	7♈19	24°7	14°40	26°1	7°17	7°36	0°5	24°48	23°48	10°6	8°48	8°4	14°34	T 12
F 13	11 22 9	22°19'39	21°20	24°56	15°54	26°48	7°10	7°32	0°5	24°48	23°47	10°D 5	8°45	8°10	14°36	F 13
S 14	11 26 6	23°19'29	5♈3	25°49	17°9	27°35	7°2	7°27	0°5	24°49	23°46	10°6	8°42	8°17	14°39	S 14
S 15	11 30 2	24°19'16	18°28	26°44	18°24	28°21	6°55	7°23	0°4	24°49	23°44	10°7	8°39	8°24	14°42	S 15
M16	11 33 59	25°19'02	1♈36	27°43	19°39	29°8	6°48	7°18	0°4	24°49	23°43	10°8	8°36	8°30	14°45	M16
T 17	11 37 55	26°18'45	14°31	28°44	20°53	29°55	6°40	7°14	0°3	24°50	23°41	10°R 9	8°33	8°37	14°48	T 17
W18	11 41 52	27°18'25	27°12	29°48	22°8	0♈42	6°33	7°9	0°2	24°50	23°40	10°7	8°29	8°44	14°51	W18
T 19	11 45 49	28°18'04	9♈44	0♈54	23°23	1°28	6°25	7°4	0°2	24°50	23°38	10°3	8°26	8°51	14°54	T 19
F 20	11 49 45	29°17'41	22°5	2°2	24°37	2°15	6°17	7°0	0°1	24°51	23°37	9°57	8°23	8°57	14°57	F 20
S 21	11 53 42	0♈17'15	4♈18	3°13	25°52	3°1	6°10	6°55	29♈59	24°51	23°35	9°49	8°20	9°4	15°0	S 21
S 22	11 57 38	1°16'48	16°24	4°25	27°7	3°48	6°2	6°50	29°59	24°51	23°34	9°39	8°17	9°11	15°3	S 22
M23	12 1 35	2°16'18	28°24	5°40	28°21	4°34	5°54	6°46	29°58	24°51	23°32	9°29	8°13	9°18	15°6	M23
T 24	12 5 31	3°15'47	10♈18	6°57	29°36	5°21	5°47	6°41	29°57	24°51	23°31	9°19	8°10	9°24	15°9	T 24
W25	12 9 28	4°15'14	22°10	8°15	0♈51	6°7	5°39	6°36	29°56	24°51	23°29	9°10	8°7	9°31	15°13	W25
T 26	12 13 24	5°14'39	4♈2	9°35	2°5	6°54	5°31	6°32	29°55	24°51	23°28	9°3	8°4	9°38	15°16	T 26
F 27	12 17 21	6°14'02	15°58	10°57	3°20	7°40	5°23	6°27	29°54	24°R51	23°26	8°59	8°1	9°44	15°19	F 27
S 28	12 21 17	7°13'24	28°2	12°21	4°34	8°26	5°16	6°22	29°53	24°51	23°25	8°56	7°58	9°51	15°22	S 28
S 29	12 25 14	8°12'44	10♈19	13°46	5°49	9°13	5°8	6°18	29°52	24°51	23°23	8°D56	7°54	9°58	15°26	S 29
M30	12 29 11	9°12'02	22°54	15°12	7°3	9°59	5°0	6°13	29°51	24°51	23°21	8°56	7°51	10°5	15°29	M30
T 31	12 33 7	10♈11'18	5♈51	16♈41	8♈18	10♈45	4♈52	6♈8	29♈49	24♈51	23♈20	8°R57	7♈48	10♈11	15♈33	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	
S 1	7s42	20s10	3n15	12s48	2n 8	12s21	1s17	5s49	0s55	1s57	1n33	0s55	2n36	19s57	0n14	22s 1	1n19	7n 0	17n32	17n35	17n54	8s56	14n 4	2s 6						
M 2	7 19	20 21	2 16	13 3	1 54	11 55	1 18	5 30	0 54	1 54	1 33	0 53	2 37	19 57	0 14	22 1	1 19	7 1	17 32	17 35	17 55	8 58	14 5	2 6						
T 3	6 56	19 27	1 9	13 16	1 41	11 29	1 19	5 11	0 54	1 52	1 33	0 52	2 37	19 57	0 14	22 1	1 19	7 2	17 33	17 35	17 56	9 0	14 5	2 6						
W 4	6 33	17 27	0s 4	13 26	1 27	11 2	1 20	4 53	0 53	1 49	1 34	0 50	2 37	19 57	0 14	22 1	1 19	7 3	17 33	17 34	17 57	9 2	14 6	2 6						
T 5	6 10	14 22	1 19	13 35	1 13	10 36	1 21	4 34	0 53	1 46	1 34	0 48	2 37	19 57	0 14	22 1	1 19	7 3	17 34	17 35	17 58	9 4	14 7	2 6						
F 6	5 47	10 22	2 31	13 42	1 0	10 9	1 22	4 15	0 52	1 44	1 34	0 47	2 37	19 57	0 14	22 1	1 19	7 4	17 34	17 35	17 58	9 7	14 8	2 6						
S 7	5 24	5 40	3 34	13 46	0 47	9 41	1 23	3 56	0 52	1 41	1 34	0 45	2 37	19 57	0 14	22 1	1 20	7 5	17 34	17 36	17 59	9 9	14 8	2 6						
S 8	5 0	0 35	4 24	13 49	0 34	9 14	1 23	3 37	0 52	1 38	1 34	0 43	2 38	19 57	0 14	22 1	1 20	7 6	17 35	17 38	18 0	9 11	14 9	2 6						
M 9	4 37	4n33	4 57	13 50	0 22	8 46	1 24	3 18	0 51	1 35	1 34	0 41	2 38	19 57	0 14	22 1	1 20	7 7	17 35	17 39	18 1	9 13	14 10	2 6						
T 10	4 13	9 24	5 10	13 49	0 10	8 18	1 24	2 59	0 51	1 32	1 34	0 39	2 38	19 57	0 14	22 1	1 20	7 7	17 36	17 41	18 2	9 15	14 11	2 6						
W11	3 50	13 38	5 2	13 46	0s 2	7 50	1 25	2 40	0 50	1 29	1 35	0 38	2 38	19 57	0 14	22 1	1 20	7 8	17 36	17 42	18 3	9 17	14 11	2 6						
T 12	3 26	17 0	4 36	13 41	0 13	7 21	1 25	2 21	0 50	1 26	1 35	0 36	2 38	19 57	0 14	22 1	1 20	7 9	17 36	17 43	18 4	9 19	14 12	2 6						
F 13	3 3	19 16	3 54	13 35	0 24	6 52	1 26	2 2	0 49	1 24	1 35	0 34	2 38	19 57	0 14	22 1	1 20	7 10	17 37	17 43	18 4	9 21	14 13	2 6						
S 14	2 39	20 22	2 58	13 27	0 34	6 24	1 26	1 43	0 49	1 21	1 35	0 32	2 38	19 57	0 14	22 1	1 20	7 10	17 37	17 43	18 5	9 24	14 14	2 6						
S 15	2 15	20 16	1 55	13 18	0 44	5 55	1 26	1 24	0 48	1 18	1 35	0 30	2 38	19 57	0 14	22 1	1 20	7 11	17 37	17 43	18 6	9 26	14 15	2 6						
M16	1 52	19 3	0 46	13 6	0 54	5 25	1 26	1 5	0 48	1 15	1 35	0 28	2 38	19 57	0 14	22 1	1 20	7 12	17 37	17 42	18 7	9 28	14 16	2 6						
T 17	1 28	16 51	0n24	12 54	1 3	4 56	1 26	0 46	0 47	1 12	1 35	0 26	2 39	19 56	0 14	22 1	1 20	7 13	17 38	17 42	18 8	9 30	14 16	2 6						
W18	1 4	13 52	1 31	12 39	1 11	4 27	1 26	0 27	0 47	1 8	1 35	0 24	2 39	19 56	0 14	22 1	1 20	7 14	17 38	17 43	18 8	9 32	14 17	2 6						
T 19	0 41	10 17	2 33	12 23	1 19	3 57	1 26	0 7	0 46	1 5	1 35	0 23	2 39	19 56	0 14	22 0	1 20	7 14	17 38	17 44	18 9	9 34	14 18	2 6						
F 20	0 17	6 18	3 26	12 6	1 27	3 27	1 26	0n11	0 46	1 2	1 35	0 21	2 39	19 56	0 14	22 0	1 20	7 15	17 39	17 45	18 10	9 36	14 19	2 6						
S 21	0n 7	2 6	4 9	11 47	1 34	2 58	1 26	0 30	0 45	0 59	1 35	0 19	2 39	19 56	0 14	22 0	1 20	7 16	17 39	17 47	18 11	9 38	14 20	2 6						
S 22	0 31	2s 7	4 41	11 27	1 41	2 28	1 26	0 49	0 45	0 56	1 35	0 17	2 39	19 56	0 14	22 0	1 20	7 17	17 39	17 50	18 12	9 40	14 21	2 6						
M23	0 54	6 14	5 0	11 6	1 47	1 58	1 26	1 8	0 44	0 53	1 35	0 15	2 39	19 55	0 14	22 0	1 20	7 17	17 39	17 53	18 13	9 42	14 22	2 6						
T 24	1 18	10 5	5 5	10 43	1 53	1 28	1 25	1 27	0 44	0 50	1 36	0 13	2 39	19 55	0 14	22 0	1 20	7 18	17 40	17 55	18 13	9 45	14 23	2 6						
W25	1 41	13 31	4 58	10 18	1 58	0 58	1 25	1 46	0 43	0 47	1 36	0 11	2 39	19 55	0 14	22 0	1 20	7 19	17 40	17 58	18 14	9 47	14 24	2 6						
T 26	2 5	16 25	4 37	9 53	2 3	0 28	1 24	2 5	0 43	0 44	1 36	0 9	2 39	19 55	0 14	22 0	1 20	7 20	17 40	18 0	18 15	9 49	14 25	2 6						
F 27	2 29	18 39	4 4	9 26	2 8	0n 3	1 24	2 24	0 42	0 41	1 36	0 7	2 39	19 55	0 14	22 0	1 20	7 20	17 40	18 1	18 16	9 51	14 26	2 6						
S 28	2 52	20 5	3 21	8 57	2 12	0 33	1 23	2 42	0 42	0 38	1 36	0 6	2 39	19 54	0 14	22 0	1 20	7 21	17 40	18 1	18 17	9 53	14 27	2 6						
S 29	3 15	20 36	2 27	8 28	2 15	1 3	1 23	3 1	0 41	0 35	1 36	0 4	2 39	19 54	0 14	22 0	1 20	7 22	17 41	18 2	18 18	9 55	14 27	2 6						
M30	3 39	20 6	1 25	7 57	2 18	1 33	1 22	3 20	0 41	0 32	1 36	0 2	2 39	19 54	0 14	22 0	1 20	7 22	17 41	18 1	18 18	9 57	14 28	2 6						
T 31	4n 2	18s33	0n17	7s25	2s21	2n 3	1s21	3n38	0s40	0s28	1n36	0n 0	2n39	19s53	0n14	22s 0	1n20	7n23	17n41	18n 1	18n19	9s59	14n29	2s 6						

ASTRODIENST EPHEMERIS for the year 1981

geocentric

APRIL 1981

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	12 37 4	11°10'32	19°15	18°11	9°33	11°31	4°R45	6°R 4	29°R48	24°R51	23°R18	8°R57	7°Ω45	10°M18	15°S36	W 1
T 2	12 41 0	12° 9'45	3°37	19°42	10°47	12°17	4°37	5°59	29°M47	24°R51	23°16	8°Ω54	7°42	10°25	15°39	T 2
F 3	12 44 57	13° 8'55	17°28	21°15	12° 2	13° 4	4°29	5°54	29°45	24°51	23°15	8°49	7°38	10°31	15°43	F 3
S 4	12 48 53	14° 8'04	2°14	22°49	13°16	13°50	4°22	5°50	29°44	24°50	23°13	8°42	7°35	10°38	15°47	S 4
S 5	12 52 50	15° 7'11	17°17	24°25	14°30	14°36	4°14	5°45	29°42	24°50	23°11	8°33	7°32	10°45	15°50	S 5
M 6	12 56 46	16° 6'16	2°30	26° 2	15°45	15°22	4° 7	5°41	29°41	24°50	23°10	8°23	7°29	10°52	15°54	M 6
T 7	13 0 43	17° 5'18	17°39	27°41	16°59	16° 8	3°59	5°36	29°39	24°50	23° 8	8°13	7°26	10°58	15°57	T 7
W 8	13 4 40	18° 4'19	2°16	29°21	18°14	16°53	3°52	5°31	29°37	24°49	23° 6	8° 5	7°23	11° 5	16° 1	W 8
T 9	13 8 36	19° 3'17	17°13	1°3	19°28	17°39	3°45	5°27	29°36	24°49	23° 5	7°59	7°19	11°12	16° 5	T 9
F 10	13 12 33	20° 2'13	1°26	2°46	20°42	18°25	3°38	5°22	29°34	24°48	23° 3	7°55	7°16	11°19	16° 8	F 10
S 11	13 16 29	21° 1'07	15°12	4°31	21°57	19°11	3°30	5°18	29°32	24°48	23° 1	7°54	7°13	11°25	16°12	S 11
S 12	13 20 26	21°59'58	28°34	6°17	23°11	19°57	3°23	5°14	29°31	24°47	23° 0	7°D54	7°10	11°32	16°16	S 12
M13	13 24 22	22°58'47	11°Ω35	8° 5	24°25	20°42	3°16	5° 9	29°29	24°47	22°58	7°R54	7° 7	11°39	16°19	M13
T 14	13 28 19	23°57'34	24°17	9°54	25°40	21°28	3°10	5° 5	29°27	24°46	22°56	7°53	7° 4	11°45	16°23	T 14
W15	13 32 15	24°56'19	6°M46	11°45	26°54	22°13	3° 3	5° 1	29°25	24°46	22°55	7°50	7° 0	11°52	16°27	W15
T 16	13 36 12	25°55'01	19° 3	13°38	28° 8	22°59	2°56	4°56	29°23	24°45	22°53	7°44	6°57	11°59	16°31	T 16
F 17	13 40 9	26°53'41	1°12	15°32	29°22	23°44	2°50	4°52	29°21	24°44	22°51	7°35	6°54	12° 6	16°35	F 17
S 18	13 44 5	27°52'19	13°14	17°27	0°37	24°30	2°43	4°48	29°19	24°44	22°49	7°24	6°51	12°12	16°39	S 18
S 19	13 48 2	28°50'55	25°12	19°24	1°51	25°15	2°37	4°44	29°17	24°43	22°48	7°11	6°48	12°19	16°42	S 19
M20	13 51 58	29°49'29	7°M 7	21°23	3° 5	26° 0	2°30	4°40	29°15	24°42	22°46	6°57	6°44	12°26	16°46	M20
T 21	13 55 55	0°348'02	19° 0	23°23	4°19	26°46	2°24	4°36	29°13	24°42	22°44	6°43	6°41	12°33	16°50	T 21
W22	13 59 51	1°46'32	0°352	25°24	5°33	27°31	2°18	4°32	29°11	24°41	22°43	6°30	6°38	12°39	16°54	W22
T 23	14 3 48	2°45'01	12°46	27°27	6°48	28°16	2°12	4°28	29° 9	24°40	22°41	6°20	6°35	12°46	16°58	T 23
F 24	14 7 44	3°43'28	24°43	29°31	8° 2	29° 1	2° 7	4°25	29° 7	24°39	22°39	6°13	6°32	12°53	17° 2	F 24
S 25	14 11 41	4°41'53	6°348	1°37	9°16	29°46	2° 1	4°21	29° 4	24°38	22°38	6° 8	6°29	12°59	17° 6	S 25
S 26	14 15 38	5°40'17	19° 5	3°43	10°30	0°31	1°56	4°17	29° 2	24°37	22°36	6° 6	6°25	13° 6	17°10	S 26
M27	14 19 34	6°38'39	1°37	5°51	11°44	1°16	1°50	4°14	29° 0	24°36	22°35	6° 6	6°22	13°13	17°14	M27
T 28	14 23 31	7°37'00	14°29	7°59	12°58	2° 1	1°45	4°10	28°58	24°36	22°33	6° 6	6°19	13°20	17°18	T 28
W29	14 27 27	8°35'19	27°47	10° 8	14°12	2°46	1°40	4° 7	28°55	24°35	22°31	6° 5	6°16	13°26	17°22	W29
T 30	14 31 24	9°33'37	11°32	12°17	15°26	3°31	1°35	4° 3	28°53	24°34	22°30	6° 2	6°13	13°33	17°26	T 30

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
W 1	4n25	15s55	0s55	6s52	2s23	2n33	1s20	3n57	0s40	0s25	1n36	0n 2	2n39	19s53	0n14	22s 0	1n20	7n24	17n41	18n 1	18n20	10s 1	14n30	2s 6	
T 2	4 48	12 18	2 5	6 18	2 25	3 3	1 19	4 16	0 39	0 22	1 36	0 4	2 39	19 53	0 14	22 0	1 20	7 25	17 41	18 2	18 21	10 4	14 31	2 6	
F 3	5 12	7 52	3 10	5 42	2 26	3 33	1 18	4 34	0 39	0 19	1 35	0 6	2 39	19 53	0 14	22 0	1 21	7 25	17 41	18 3	18 22	10 6	14 32	2 6	
S 4	5 34	2 51	4 4	5 5	2 26	4 3	1 17	4 52	0 38	0 16	1 35	0 7	2 39	19 52	0 14	22 0	1 21	7 26	17 41	18 5	18 22	10 8	14 33	2 6	
S 5	5 57	2n27	4 42	4 28	2 26	4 33	1 16	5 11	0 37	0 14	1 35	0 9	2 39	19 52	0 14	22 0	1 21	7 27	17 41	18 8	18 23	10 10	14 34	2 6	
M 6	6 20	7 38	5 1	3 49	2 26	5 3	1 15	5 29	0 37	0 11	1 35	0 11	2 39	19 52	0 14	22 0	1 21	7 27	17 41	18 10	18 24	10 12	14 35	2 6	
T 7	6 43	12 19	4 58	3 9	2 25	5 32	1 14	5 47	0 36	0 8	1 35	0 13	2 39	19 51	0 14	22 0	1 21	7 28	17 42	18 13	18 25	10 14	14 36	2 6	
W 8	7 5	16 11	4 35	2 27	2 24	6 2	1 13	6 5	0 36	0 5	1 35	0 15	2 39	19 51	0 14	22 0	1 21	7 29	17 42	18 15	18 26	10 16	14 37	2 6	
T 9	7 28	18 56	3 55	1 45	2 22	6 31	1 11	6 23	0 35	0 2	1 35	0 16	2 39	19 51	0 14	22 0	1 21	7 29	17 42	18 16	18 26	10 18	14 38	2 6	
F 10	7 50	20 25	3 1	1 2	2 20	7 0	1 10	6 41	0 35	0n 1	1 35	0 18	2 39	19 50	0 14	22 0	1 21	7 30	17 42	18 17	18 27	10 20	14 40	2 6	
S 11	8 12	20 38	1 57	0 18	2 17	7 29	1 9	6 59	0 34	0 4	1 35	0 20	2 39	19 50	0 14	22 0	1 21	7 31	17 42	18 18	18 28	10 22	14 41	2 6	
S 12	8 34	19 39	0 49	0n27	2 14	7 58	1 7	7 17	0 33	0 6	1 35	0 21	2 39	19 49	0 14	21 59	1 21	7 31	17 42	18 18	18 29	10 24	14 42	2 6	
M13	8 56	17 37	0n20	1 13	2 10	8 27	1 6	7 35	0 33	0 9	1 35	0 23	2 39	19 49	0 14	21 59	1 21	7 32	17 42	18 18	18 30	10 27	14 43	2 6	
T 14	9 18	14 46	1 26	2 0	2 6	8 56	1 4	7 52	0 32	0 12	1 35	0 25	2 39	19 49	0 14	21 59	1 21	7 32	17 42	18 18	18 31	10 29	14 44	2 6	
W15	9 39	11 18	2 26	2 48	2 1	9 24	1 2	8 10	0 32	0 14	1 35	0 26	2 39	19 48	0 14	21 59	1 21	7 33	17 42	18 19	18 31	10 31	14 45	2 6	
T 16	10 1	7 23	3 19	3 36	1 55	9 52	1 1	8 27	0 31	0 17	1 34	0 28	2 39	19 48	0 14	21 59	1 21	7 34	17 42	18 20	18 32	10 33	14 46	2 6	
F 17	10 22	3 14	4 2	4 26	1 49	10 20	0 59	8 45	0 30	0 19	1 34	0 30	2 39	19 47	0 14	21 59	1 21	7 34	17 42	18 22	18 33	10 35	14 47	2 6	
S 18	10 43	1s 1	4 34	5 16	1 43	10 48	0 57	9 2	0 30	0 22	1 34	0 31	2 39	19 47	0 14	21 59	1 21	7 35	17 42	18 25	18 34	10 37	14 48	2 6	
S 19	11 4	5 12	4 53	6 6	1 36	11 15	0 56	9 19	0 29	0 24	1 34	0 33	2 39	19 47	0 14	21 59	1 21	7 35	17 42	18 29	18 35	10 39	14 49	2 6	
M20	11 25	9 10	5 0	6 58	1 29	11 42	0 54	9 36	0 29	0 26	1 34	0 34	2 38	19 46	0 14	21 59	1 21	7 36	17 42	18 32	18 35	10 41	14 50	2 6	
T 21	11 45	12 46	4 53	7 49	1 21	12 9	0 52	9 53	0 28	0 29	1 34	0 36	2 38	19 46	0 14	21 59	1 21	7 36	17 42	18 36	18 36	10 43	14 51	2 6	
W22	12 6	15 52	4 33	8 42	1 13	12 35	0 50	10 10	0 27	0 31	1 34	0 37	2 38	19 45	0 14	21 59	1 21	7 37	17 41	18 39	18 37	10 45	14 52	2 6	
T 23	12 26	18 20	4 2	9 34	1 4	13 2	0 48	10 26	0 27	0 33	1 34	0 38	2 38	19 45	0 14	21 59	1 21	7 37	17 41	18 41	18 38	10 47	14 53	2 6	
F 24	12 46	20 0	3 20	10 26	0 55	13 28	0 46	10 43	0 26	0 35	1 33	0 40	2 38	19 44	0 14	21 59	1 21	7 38	17 41	18 43	18 38	10 50	14 54	2 6	
S 25	13 5	20 48	2 28	11 19	0 46	13 53	0 44	11 0	0 26	0 37	1 33	0 41	2 38	19 44	0 14	21 59	1 21	7 38	17 41	18 44	18 39	10 52	14 55	2 6	
S 26	13 25	20 37	1 29	12 11	0 36	14 18	0 42	11 16	0 25	0 39	1 33	0 43	2 38	19 43	0 14	21 59	1 21	7 39	17 41	18 45	18 40	10 54	14 56	2 6	
M27	13 44	19 25	0 24	13 4	0 26	14 43	0 40	11 32	0 24	0 41	1 33	0 44	2 38	19 43	0 14	21 59	1 21	7 39	17 41	18 45	18 41	10 56	14 57	2 6	
T 28	14 3	17 12	0s44	13 55	0 16	15 8	0 38	11 48	0 24	0 43	1 33	0 45	2 37	19 42	0 14	21 59	1 21	7 40	17 41	18 45	18 42	10 58	14 58	2 7	
W29	14 22	14 0	1 52	14 46	0 5	15 32	0 36	12 4	0 23	0 45	1 33	0 46	2 37	19 42	0 14	21 58	1 21	7 40	17 41	18 45	18 42	11 0	14 59	2 7	
T 30	14n41	rs56	2s55	15n36	0n 5	15n56	0s33	12n20	0s23	0n47	1n32	0n48	2n37	19s41	0n14	21s58	1n21	7n40	17n40	18n46	18n43	11s 2	15n 1	2s 7	

ASTRODIENST EPHEMERIS for the year 1981

geocentric

MAY 1981

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	14 35 20	10 ⁸ 31'53	25 ⁴ 47	14 ⁸ 26	16 ⁸ 40	4 ⁸ 16	1°R30	4°R 0	28°R51	24°R33	22°R28	5°R57	6 ⁸ 10	13 ⁸ 40	17 ⁸ 30	F 1
S 2	14 39 17	11°30'07	10 ⁹ 29	16°36	17°54	5° 1	1 ⁸ 26	3 ⁸ 57	28 ⁸ 48	24 ⁸ 31	22 ⁸ 27	5 ⁸ 49	6° 6	13°46	17°34	S 2
S 3	14 43 13	12°28'20	25°34	18°44	19° 8	5°45	1°21	3°53	28°46	24°30	22°25	5°40	6° 3	13°53	17°38	S 3
M 4	14 47 10	13°26'31	10 ⁸ 51	20°52	20°22	6°30	1°17	3°50	28°44	24°29	22°23	5°29	6° 0	14° 0	17°42	M 4
T 5	14 51 6	14°24'41	26°11	22°59	21°36	7°14	1°13	3°47	28°41	24°28	22°22	5°18	5°57	14° 7	17°46	T 5
W 6	14 55 3	15°22'49	11 ⁸ 20	25° 5	22°50	7°59	1° 9	3°44	28°39	24°27	22°20	5° 9	5°54	14°13	17°50	W 6
T 7	14 59 0	16°20'55	26°11	27° 9	24° 4	8°44	1° 5	3°42	28°36	24°26	22°19	5° 2	5°50	14°20	17°54	T 7
F 8	15 2 56	17°18'59	10 ⁸ 35	29°11	25°18	9°28	1° 2	3°39	28°34	24°25	22°17	4°58	5°47	14°27	17°58	F 8
S 9	15 6 53	18°17'02	24°31	1 ⁸ 11	26°32	10°12	0°58	3°36	28°32	24°23	22°16	4°56	5°44	14°34	18° 2	S 9
S 10	15 10 49	19°15'02	7 ⁸ 59	3° 9	27°45	10°57	0°55	3°34	28°29	24°22	22°14	4°D56	5°41	14°40	18° 6	S 10
M 11	15 14 46	20°13'01	21° 2	5° 4	28°59	11°41	0°52	3°31	28°27	24°21	22°13	4°R56	5°38	14°47	18°10	M 11
T 12	15 18 42	21°10'58	3 ⁸ 43	6°56	0 ⁸ 13	12°25	0°49	3°29	28°24	24°20	22°11	4°55	5°35	14°54	18°14	T 12
W 13	15 22 39	22° 8'52	16° 6	8°46	1°27	13° 9	0°46	3°26	28°22	24°18	22°10	4°53	5°31	15° 0	18°18	W 13
T 14	15 26 36	23° 6'45	28°17	10°32	2°41	13°53	0°44	3°24	28°19	24°17	22° 9	4°48	5°28	15° 7	18°22	T 14
F 15	15 30 32	24° 4'37	10 ⁸ 19	12°15	3°54	14°37	0°41	3°22	28°17	24°16	22° 7	4°41	5°25	15°14	18°26	F 15
S 16	15 34 29	25° 2'26	22°16	13°55	5° 8	15°21	0°39	3°20	28°14	24°14	22° 6	4°31	5°22	15°21	18°30	S 16
S 17	15 38 25	26° 0'14	4 ⁸ 9	15°32	6°22	16° 5	0°37	3°18	28°12	24°13	22° 5	4°19	5°19	15°27	18°34	S 17
M 18	15 42 22	26°58'01	16° 1	17° 5	7°36	16°49	0°35	3°16	28° 9	24°12	22° 3	4° 7	5°15	15°34	18°38	M 18
T 19	15 46 18	27°55'46	27°54	18°35	8°49	17°33	0°34	3°15	28° 7	24°10	22° 2	3°54	5°12	15°41	18°42	T 19
W 20	15 50 15	28°53'30	9 ⁸ 49	20° 2	10° 3	18°17	0°32	3°13	28° 4	24° 9	22° 1	3°43	5° 9	15°47	18°46	W 20
T 21	15 54 11	29°51'13	21°48	21°25	11°17	19° 1	0°31	3°11	28° 2	24° 7	21°59	3°34	5° 6	15°54	18°50	T 21
F 22	15 58 8	0 ⁸ 48'54	3 ⁸ 52	22°44	12°30	19°44	0°30	3°10	27°59	24° 6	21°58	3°28	5° 3	16° 1	18°54	F 22
S 23	16 2 5	1°46'34	16° 4	24° 0	13°44	20°28	0°29	3° 8	27°57	24° 5	21°57	3°24	5° 0	16° 8	18°58	S 23
S 24	16 6 1	2°44'13	28°26	25°12	14°58	21°12	0°28	3° 7	27°54	24° 3	21°56	3°D23	4°56	16°14	19° 2	S 24
M 25	16 9 58	3°41'51	11 ⁸ 26	26°20	16°11	21°55	0°27	3° 6	27°52	24° 2	21°55	3°23	4°53	16°21	19° 6	M 25
T 26	16 13 54	4°39'28	23°56	27°25	17°25	22°39	0°27	3° 5	27°49	24° 0	21°54	3°24	4°50	16°28	19°10	T 26
W 27	16 17 51	5°37'04	7 ⁸ 10	28°25	18°38	23°22	0°27	3° 4	27°47	23°59	21°52	3°R24	4°47	16°35	19°14	W 27
T 28	16 21 47	6°34'39	20°49	29°22	19°52	24° 5	0°D27	3° 3	27°44	23°57	21°51	3°23	4°44	16°41	19°18	T 28
F 29	16 25 44	7°32'13	4 ⁸ 54	0 ⁸ 15	21° 6	24°49	0°27	3° 2	27°42	23°56	21°50	3°20	4°41	16°48	19°22	F 29
S 30	16 29 40	8°29'47	19°24	1° 4	22°19	25°32	0°27	3° 2	27°39	23°54	21°49	3°15	4°37	16°55	19°26	S 30
S 31	16 33 37	9 ⁸ 27'19	4 ⁸ 16	1 ⁸ 48	23 ⁸ 33	26 ⁸ 15	0°28	3 ⁸ 1	27 ⁸ 37	23 ⁸ 52	21°48	3°8 8	4°34	17 ⁸ 1	19°30	S 31

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
F 1	14n59	5s12	3s50	16n25	0n16	16n19	0s31	12n36	0s22	0n49	1n32	0n49	2n37	19s41	0n14	21s58	1n21	7n41	17n40	18n47	18n44	11s 4	15n 2	2s 7
S 2	15 17	0 1	4 32	17 13	0 27	16 42	0 29	12 51	0 21	0 50	1 32	0 50	2 37	19 40	0 14	21 58	1 21	7 41	17 40	18 49	18 45	11 6	15 3	2 7
S 3	15 35	5n17	4 56	18 0	0 37	17 5	0 27	13 7	0 21	0 52	1 32	0 51	2 37	19 40	0 14	21 58	1 21	7 42	17 40	18 51	18 46	11 8	15 4	2 7
M 4	15 52	10 20	4 59	18 44	0 47	17 27	0 24	13 22	0 20	0 53	1 32	0 52	2 37	19 39	0 14	21 58	1 21	7 42	17 40	18 54	18 46	11 10	15 5	2 7
T 5	16 10	14 44	4 41	19 27	0 58	17 49	0 22	13 37	0 19	0 55	1 31	0 53	2 36	19 39	0 14	21 58	1 22	7 42	17 39	18 57	18 47	11 12	15 6	2 7
W 6	16 27	18 7	4 3	20 8	1 8	18 10	0 20	13 53	0 19	0 56	1 31	0 54	2 36	19 38	0 14	21 58	1 22	7 43	17 39	18 59	18 48	11 14	15 7	2 7
T 7	16 44	20 14	3 10	20 46	1 17	18 31	0 17	14 7	0 18	0 57	1 31	0 55	2 36	19 38	0 14	21 58	1 22	7 43	17 39	19 1	18 49	11 16	15 8	2 7
F 8	17 0	20 56	2 5	21 23	1 26	18 51	0 15	14 22	0 17	0 59	1 31	0 56	2 36	19 37	0 14	21 58	1 22	7 43	17 39	19 2	18 50	11 19	15 9	2 7
S 9	17 16	20 19	0 55	21 56	1 34	19 10	0 13	14 37	0 17	1 0	1 31	0 57	2 36	19 37	0 13	21 58	1 22	7 43	17 38	19 2	18 50	11 21	15 10	2 7
S 10	17 32	18 32	0n16	22 28	1 42	19 30	0 10	14 51	0 16	1 1	1 30	0 58	2 36	19 36	0 13	21 58	1 22	7 44	17 38	19 2	18 51	11 23	15 11	2 7
M 11	17 48	15 49	1 24	22 57	1 50	19 48	0 8	15 6	0 16	1 2	1 30	0 59	2 35	19 36	0 13	21 58	1 22	7 44	17 38	19 2	18 52	11 25	15 12	2 7
T 12	18 3	12 25	2 26	23 23	1 56	20 7	0 5	15 20	0 15	1 3	1 30	0 59	2 35	19 35	0 13	21 58	1 22	7 44	17 38	19 2	18 53	11 27	15 13	2 7
W 13	18 18	8 33	3 20	23 46	2 2	20 24	0 3	15 34	0 14	1 4	1 30	1 0	2 35	19 35	0 13	21 57	1 22	7 44	17 37	19 3	18 53	11 29	15 14	2 8
T 14	18 33	4 24	4 3	24 8	2 7	20 41	0 1	15 47	0 14	1 5	1 29	1 1	2 35	19 34	0 13	21 57	1 22	7 45	17 37	19 4	18 54	11 31	15 15	2 8
F 15	18 48	0 8	4 35	24 26	2 12	20 58	0n 2	16 1	0 13	1 5	1 29	1 2	2 35	19 34	0 13	21 57	1 22	7 45	17 37	19 6	18 55	11 33	15 16	2 8
S 16	19 2	4s 6	4 55	24 43	2 15	21 14	0 4	16 15	0 12	1 6	1 29	1 2	2 34	19 33	0 13	21 57	1 22	7 45	17 36	19 8	18 56	11 35	15 17	2 8
S 17	19 15	8 10	5 2	24 56	2 18	21 29	0 7	16 28	0 12	1 7	1 29	1 3	2 34	19 32	0 13	21 57	1 22	7 45	17 36	19 11	18 57	11 37	15 18	2 8
M 18	19 29	11 55	4 55	25 8	2 20	21 44	0 9	16 41	0 11	1 7	1 28	1 3	2 34	19 32	0 13	21 57	1 22	7 45	17 36	19 14	18 57	11 39	15 19	2 8
T 19	19 42	15 12	4 36	25 17	2 21	21 58	0 12	16 54	0 10	1 8	1 28	1 4	2 34	19 31	0 13	21 57	1 22	7 45	17 35	19 17	18 58	11 41	15 20	2 8
W 20	19 55	17 53	4 5	25 25	2 21	22 11	0 14	17 7	0 10	1 8	1 28	1 4	2 34	19 31	0 13	21 57	1 22	7 46	17 35	19 19	18 59	11 43	15 21	2 8
T 21	20 7	19 49	3 22	25 30	2 20	22 24	0 17	17 20	0 9	1 8	1 28	1 5	2 33	19 30	0 13	21 57	1 22	7 46	17 35	19 21	19 0	11 45	15 22	2 8
F 22	20 19	20 53	2 31	25 33	2 19	22 37	0 19	17 32	0 8	1 9	1 28	1 5	2 33	19 30	0 13	21 57	1 22	7 46	17 34	19 23	19 0	11 47	15 23	2 8
S 23	20 31	20 58	1 31	25 34	2 16	22 48	0 21	17 44	0 8	1 9	1 27	1 5	2 33	19 29	0 13	21 57	1 22	7 46	17 34	19 24	19 1	11 49	15 24	2 9
S 24	20 42	20 3	0 26	25 34	2 13	22 59	0 24	17 57	0 7	1 9	1 27	1 6	2 33	19 29	0 13	21 57	1 22	7 46	17 33	19 24	19 2	11 51	15 25	2 9
M 25	20 54	18 7	0s41	25 32	2 9	23 10	0 26	18 8	0 7	1 9	1 27	1 6	2 33	19 28	0 13	21 57	1 22	7 46	17 33	19 24	19 3	11 54	15 26	2 9
T 26	21 4	15 14	1 48	25 29	2 4	23 19	0 29	18 20	0 6	1 9	1 27	1 6	2 32	19 28	0 13	21 56	1 22	7 46	17 33	19 24	19 3	11 56	15 27	2 9
W 27	21 15	11 31	2 51	25 24	1 58	23 28	0 31	18 32	0 5	1 9	1 26	1 6	2 32	19 27	0 13	21 56	1 22	7 46	17 32	19 24	19 4	11 58	15 28	2 9
T 28	21 24	7 6	3 46	25 17	1 51	23 36	0 33	18 43	0 5	1 8	1 26	1 7	2 32	19 26	0 13	21 56	1 22	7 46	17 32	19 24	19 5	12 0	15 29	2 9
F 29	21 34	2 10	4 29	25 10	1 43	23 44	0 36	18 54	0 4	1 8	1 26	1 7	2 32	19 26	0 13	21 56	1 22	7 46	17 31	19 25	19 6	12 2	15 30	2 9
S 30	21 43	3n 0	4 57	25 1	1 35	23 51	0 38	19 5	0 3	1 8	1 26	1 7	2 31	19 25	0 13	21 56	1 22	7 46	17 31	19 26	19 6	12 4	15 31	2 9
S 31	21n52	8n 8	5s 6	24n51	1n25	23n57	0n40	19n16	0s 3	1n 7	1n25	1n 7	2n31	19s25	0n13	21s56	1n22	7n46	17n31	19n27	19n 7	12s 6	15n32	2s 9

ASTRODIENST EPHEMERIS for the year 1981
geocentric

JUNE 1981

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 37 34	10 ^{II} 24'51	19 ⁸ 22	2 ²⁹ 29	24 ^{II} 46	26 ⁸ 58	0 ²⁸ 28	3°R 1	27°R35	23°R51	21°R47	3°R 1	4 ^Ω 31	17 ^{III} 8	19 ⁸ 33	M 1
T 2	16 41 30	11°22'22	4 ^{II} 33	3° 5	26° 0	27°41	0°29	3 [♂] 0	27 ^{III} 32	23 [♂] 49	21 [♂] 46	2 ^Ω 53	4°28	17°15	19°37	T 2
W 3	16 45 27	12°19'52	19°40	3°36	27°13	28°24	0°30	3° 0	27°30	23°48	21°45	2°46	4°25	17°22	19°41	W 3
T 4	16 49 23	13°17'21	4 [♂] 31	4° 4	28°27	29° 7	0°31	3° 0	27°27	23°46	21°45	2°42	4°21	17°28	19°45	T 4
F 5	16 53 20	14°14'49	19° 1	4°27	29°40	29°50	0°33	3°D 0	27°25	23°45	21°44	2°39	4°18	17°35	19°49	F 5
S 6	16 57 16	15°12'16	3 ^Ω 3	4°45	0 ²⁹ 54	0 ^{II} 33	0°34	3° 0	27°23	23°43	21°43	2°D38	4°15	17°42	19°52	S 6
S 7	17 1 13	16° 9'41	16°38	4°59	2° 7	1°16	0°36	3° 0	27°20	23°41	21°42	2°39	4°12	17°48	19°56	S 7
M 8	17 5 9	17° 7'06	29°46	5° 8	3°20	1°59	0°38	3° 0	27°18	23°40	21°41	2°40	4° 9	17°55	20° 0	M 8
T 9	17 9 6	18° 4'29	12 ^{III} 31	5°R12	4°34	2°41	0°40	3° 1	27°16	23°38	21°41	2°R41	4° 6	18° 2	20° 4	T 9
W10	17 13 3	19° 1'51	24°57	5°12	5°47	3°24	0°42	3° 1	27°13	23°37	21°40	2°41	4° 2	18° 9	20° 7	W10
T11	17 16 59	19°59'12	7 [♂] 7	5° 7	7° 1	4° 7	0°45	3° 2	27°11	23°35	21°39	2°39	3°59	18°15	20°11	T11
F12	17 20 56	20°56'32	19° 8	4°59	8°14	4°49	0°48	3° 2	27° 9	23°33	21°38	2°36	3°56	18°22	20°14	F12
S13	17 24 52	21°53'51	1 ^{III} 2	4°45	9°27	5°32	0°50	3° 3	27° 7	23°32	21°38	2°31	3°53	18°29	20°18	S13
S14	17 28 49	22°51'10	12°54	4°28	10°41	6°14	0°53	3° 4	27° 5	23°30	21°37	2°24	3°50	18°35	20°22	S14
M15	17 32 45	23°48'27	24°47	4° 8	11°54	6°57	0°56	3° 5	27° 2	23°28	21°37	2°18	3°47	18°42	20°25	M15
T16	17 36 42	24°45'44	6 [♂] 42	3°44	13° 7	7°39	1° 0	3° 6	27° 0	23°27	21°36	2°11	3°43	18°49	20°29	T16
W17	17 40 38	25°43'00	18°43	3°16	14°20	8°21	1° 3	3° 7	26°58	23°25	21°36	2° 5	3°40	18°56	20°32	W17
T18	17 44 35	26°40'16	0 [♂] 50	2°47	15°34	9° 3	1° 7	3° 8	26°56	23°24	21°35	2° 0	3°37	19° 2	20°36	T18
F19	17 48 32	27°37'31	13° 6	2°15	16°47	9°45	1°11	3°10	26°54	23°22	21°35	1°57	3°34	19° 9	20°39	F19
S20	17 52 28	28°34'45	25°31	1°42	18° 0	10°28	1°14	3°11	26°52	23°20	21°34	1°55	3°31	19°16	20°43	S20
S21	17 56 25	29°32'00	8 [♂] 6	1° 8	19°13	11°10	1°19	3°13	26°50	23°19	21°34	1°D55	3°27	19°23	20°46	S21
M22	18 0 21	0 ²⁹ 29'14	20°55	0°33	20°26	11°52	1°23	3°14	26°48	23°17	21°34	1°56	3°24	19°29	20°49	M22
T23	18 4 18	1°26'27	3 [♂] 59	29 ^{II} 58	21°40	12°34	1°27	3°16	26°46	23°16	21°33	1°58	3°21	19°36	20°53	T23
W24	18 8 14	2°23'41	17°20	29°25	22°53	13°15	1°32	3°18	26°44	23°14	21°33	1°59	3°18	19°43	20°56	W24
T25	18 12 11	3°20'54	0 [♂] 59	28°52	24° 6	13°57	1°37	3°20	26°42	23°12	21°33	2°R 0	3°15	19°49	20°59	T25
F26	18 16 7	4°18'08	14°57	28°22	25°19	14°39	1°41	3°22	26°41	23°11	21°33	1°59	3°12	19°56	21° 2	F26
S27	18 20 4	5°15'21	29°14	27°54	26°32	15°21	1°46	3°24	26°39	23° 9	21°32	1°58	3° 8	20° 3	21° 5	S27
S28	18 24 1	6°12'35	13 [♂] 48	27°29	27°45	16° 3	1°52	3°26	26°37	23° 8	21°32	1°55	3° 5	20°10	21° 9	S28
M29	18 27 57	7° 9'49	28°33	27° 7	28°58	16°44	1°57	3°28	26°35	23° 6	21°32	1°52	3° 2	20°16	21°12	M29
T30	18 31 54	8 ²⁹ 7'03	13 ^{II} 23	26 ^{II} 49	0 ^Ω 11	17 ^{II} 26	2 [♂] 2	3 [♂] 31	26 ^{III} 34	23 [♂] 5	21 [♂] 32	1 ^Ω 49	2 ^Ω 59	20 ^{III} 23	21 [♂] 15	T30

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
M 1	22n 1	12n51	4s54	24n40	1n15	24n 3	0n43	19n27	0s 2	1n 7	1n25	1n 7	2n31	19s24	0n13	21s56	1n22	7n46	17n30	19n29	19n 8	12s 8	15n33	2s10	
T 2	22 9	16 46	4 21	24 28	1 4	24 8	0 45	19 37	0 1	1 6	1 25	1 7	2 31	19 24	0 13	21 56	1 22	7 46	17 30	19 31	19 9	12 10	15 33	2 10	
W 3	22 16	19 33	3 30	24 16	0 52	24 12	0 47	19 48	0 1	1 6	1 25	1 7	2 31	19 23	0 13	21 56	1 22	7 46	17 29	19 32	19 9	12 12	15 34	2 10	
T 4	22 24	20 56	2 25	24 2	0 39	24 15	0 49	19 58	0n 0	1 5	1 24	1 6	2 30	19 23	0 13	21 56	1 22	7 46	17 29	19 34	19 10	12 14	15 35	2 10	
F 5	22 31	20 53	1 13	23 48	0 26	24 18	0 51	20 8	0 1	1 4	1 24	1 6	2 30	19 22	0 13	21 56	1 22	7 45	17 28	19 34	19 11	12 16	15 36	2 10	
S 6	22 37	19 31	0n 2	23 33	0 12	24 20	0 54	20 17	0 1	1 3	1 24	1 6	2 30	19 22	0 13	21 56	1 22	7 45	17 28	19 34	19 12	12 18	15 37	2 10	
S 7	22 43	17 3	1 15	23 18	0s 3	24 21	0 56	20 27	0 2	1 2	1 24	1 6	2 30	19 21	0 13	21 56	1 22	7 45	17 27	19 34	19 13	12 20	15 38	2 10	
M 8	22 49	13 45	2 21	23 2	0 18	24 22	0 58	20 36	0 3	1 1	1 23	1 5	2 29	19 21	0 13	21 55	1 22	7 45	17 27	19 34	19 13	12 22	15 39	2 10	
T 9	22 54	9 55	3 19	22 46	0 34	24 21	1 0	20 45	0 3	1 0	1 23	1 5	2 29	19 20	0 13	21 55	1 22	7 45	17 26	19 34	19 14	12 24	15 40	2 11	
W10	22 59	5 45	4 5	22 30	0 50	24 20	1 2	20 54	0 4	0 59	1 23	1 5	2 29	19 20	0 13	21 55	1 22	7 45	17 26	19 34	19 15	12 26	15 40	2 11	
T11	23 4	1 27	4 39	22 14	1 7	24 19	1 4	21 3	0 5	0 58	1 23	1 4	2 29	19 19	0 13	21 55	1 22	7 44	17 25	19 34	19 16	12 28	15 41	2 11	
F12	23 8	2s51	5 1	21 57	1 24	24 17	1 6	21 11	0 5	0 57	1 22	1 4	2 29	19 19	0 13	21 55	1 22	7 44	17 25	19 35	19 16	12 30	15 42	2 11	
S13	23 12	7 0	5 9	21 41	1 41	24 13	1 7	21 19	0 6	0 55	1 22	1 3	2 28	19 18	0 13	21 55	1 22	7 44	17 24	19 36	19 17	12 32	15 43	2 11	
S14	23 15	10 53	5 4	21 24	1 58	24 10	1 9	21 27	0 7	0 54	1 22	1 3	2 28	19 18	0 13	21 55	1 22	7 44	17 24	19 37	19 18	12 34	15 44	2 11	
M15	23 18	14 20	4 46	21 8	2 15	24 5	1 11	21 35	0 7	0 52	1 22	1 2	2 28	19 17	0 13	21 55	1 22	7 43	17 23	19 39	19 18	12 36	15 44	2 11	
T16	23 20	17 14	4 15	20 52	2 31	24 0	1 13	21 43	0 8	0 51	1 21	1 2	2 28	19 17	0 13	21 55	1 22	7 43	17 23	19 41	19 19	12 38	15 45	2 12	
W17	23 22	19 25	3 33	20 37	2 47	23 54	1 15	21 50	0 9	0 49	1 21	1 1	2 27	19 16	0 13	21 55	1 22	7 43	17 22	19 42	19 20	12 40	15 46	2 12	
T18	23 24	20 45	2 41	20 22	3 3	23 48	1 16	21 58	0 9	0 48	1 21	1 0	2 27	19 16	0 13	21 55	1 22	7 42	17 22	19 43	19 21	12 42	15 47	2 12	
F19	23 25	21 7	1 41	20 8	3 18	23 40	1 18	22 5	0 10	0 46	1 21	0 59	2 27	19 15	0 13	21 55	1 22	7 42	17 21	19 44	19 21	12 44	15 48	2 12	
S20	23 26	20 28	0 35	19 54	3 32	23 32	1 19	22 11	0 10	0 44	1 20	0 59	2 27	19 15	0 13	21 55	1 22	7 42	17 21	19 44	19 22	12 46	15 48	2 12	
S21	23 26	18 47	0s34	19 41	3 45	23 24	1 21	22 18	0 11	0 42	1 20	0 58	2 26	19 14	0 13	21 55	1 22	7 41	17 20	19 44	19 23	12 48	15 49	2 12	
M22	23 26	16 8	1 42	19 30	3 56	23 14	1 22	22 24	0 12	0 40	1 20	0 57	2 26	19 14	0 13	21 54	1 22	7 41	17 20	19 44	19 24	12 50	15 50	2 13	
T23	23 26	12 38	2 47	19 19	4 7	23 4	1 24	22 31	0 12	0 38	1 20	0 56	2 26	19 14	0 13	21 54	1 22	7 41	17 19	19 43	19 24	12 52	15 50	2 13	
W24	23 25	8 26	3 43	19 10	4 16	22 54	1 25	22 36	0 13	0 36	1 19	0 55	2 26	19 13	0 13	21 54	1 22	7 40	17 18	19 43	19 25	12 54	15 51	2 13	
T25	23 24	3 43	4 29	19 2	4 24	22 42	1 26	22 42	0 14	0 34	1 19	0 54	2 26	19 13	0 13	21 54	1 22	7 40	17 18	19 43	19 26	12 56	15 52	2 13	
F26	23 22	1n17	5 0	18 56	4 30	22 30	1 27	22 48	0 14	0 32	1 19	0 53	2 25	19 12	0 13	21 54	1 22	7 39	17 17	19 43	19 27	12 58	15 52	2 13	
S27	23 20	6 19	5 13	18 50	4 35	22 18	1 28	22 53	0 15	0 30	1 19	0 52	2 25	19 12	0 13	21 54	1 22	7 39	17 17	19 43	19 27	13 0	15 53	2 13	
S28	23 18	11 6	5 7	18 47	4 38	22 4	1 30	22 58	0 16	0 28	1 19	0 51	2 25	19 12	0 13	21 54	1 22	7 38	17 16	19 44	19 28	13 2	15 54	2 14	
M29	23 15	15 17	4 40	18 44	4 40	21 51	1 31	23 3	0 16	0 25	1 18	0 50	2 25	19 11	0 13	21 54	1 22	7 38	17 16	19 45	19 29	13 4	15 54	2 14	
T30	23n11	18n31	3s55	18n44	4s41	21n36	1n32	23n 8	0n17	0n23	1n18	0n49	2n24	19s11	0n13	21s54	1n22	7n37	17n15	19n45	19n30	13s 6	15n55	2s14	

ASTRODIENST EPHEMERIS for the year 1981
geocentric

JULY 1981

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
W 1	18 35 50	9 ⁵⁵ 4'16	28 ¹¹ 12	26°R35	1 ¹² 24	18 ¹¹ 7	2 ¹² 8	3 ¹² 33	26°R32	23°R 3	21°R32	1°R46	2 ¹² 56	20 ¹¹ 30	21 ¹¹ 18	W 1
T 2	18 39 47	10° 1'30	12 ⁵⁵ 50	26 ¹¹ 26	2°37	18°49	2°14	3°36	26 ¹¹ 31	23°R 1	21°D32	1 ¹² 44	2°53	20°36	21°21	T 2
F 3	18 43 43	10°58'44	27°11	26°21	3°50	19°30	2°20	3°39	26°29	23° 0	21 ¹² 32	1°D43	2°49	20°43	21°24	F 3
S 4	18 47 40	11°55'57	11 ¹² 11	26°D21	5° 3	20°12	2°26	3°41	26°27	22°58	21°32	1°43	2°46	20°50	21°27	S 4
S 5	18 51 36	12°53'11	24°46	26°25	6°16	20°53	2°32	3°44	26°26	22°57	21°32	1°44	2°43	20°57	21°30	S 5
M 6	18 55 33	13°50'24	7 ¹¹ 57	26°35	7°29	21°34	2°38	3°47	26°25	22°55	21°32	1°46	2°40	21° 3	21°32	M 6
T 7	18 59 30	14°47'37	20°46	26°50	8°42	22°15	2°45	3°50	26°23	22°54	21°32	1°47	2°37	21°10	21°35	T 7
W 8	19 3 26	15°44'49	3 ¹² 15	27°10	9°55	22°56	2°51	3°53	26°22	22°52	21°33	1°48	2°33	21°17	21°38	W 8
T 9	19 7 23	16°42'02	15°28	27°35	11° 8	23°38	2°58	3°57	26°21	22°51	21°33	1°R48	2°30	21°23	21°41	T 9
F 10	19 11 19	17°39'14	27°30	28° 5	12°21	24°19	3° 5	4° 0	26°19	22°50	21°33	1°48	2°27	21°30	21°43	F 10
S 11	19 15 16	18°36'26	9 ¹¹ 25	28°40	13°33	25° 0	3°12	4° 3	26°18	22°48	21°33	1°47	2°24	21°37	21°46	S 11
S 12	19 19 12	19°33'39	21°17	29°20	14°46	25°41	3°19	4° 7	26°17	22°47	21°34	1°46	2°21	21°44	21°49	S 12
M13	19 23 9	20°30'51	3 ¹² 11	0 ⁵⁵ 6	15°59	26°21	3°27	4°10	26°16	22°45	21°34	1°44	2°18	21°50	21°51	M13
T 14	19 27 5	21°28'03	15°10	0°56	17°12	27° 2	3°34	4°14	26°15	22°44	21°35	1°43	2°14	21°57	21°54	T 14
W15	19 31 2	22°25'16	27°18	1°51	18°24	27°43	3°41	4°18	26°14	22°43	21°35	1°42	2°11	22° 4	21°56	W15
T 16	19 34 59	23°22'29	9 ¹² 35	2°51	19°37	28°24	3°49	4°22	26°13	22°41	21°35	1°41	2° 8	22°10	21°58	T 16
F 17	19 38 55	24°19'42	22° 4	3°56	20°50	29° 4	3°57	4°26	26°12	22°40	21°36	1°40	2° 5	22°17	22° 1	F 17
S 18	19 42 52	25°16'56	4 ¹² 47	5° 6	22° 2	29°45	4° 5	4°30	26°11	22°39	21°37	1°D40	2° 2	22°24	22° 3	S 18
S 19	19 46 48	26°14'10	17°42	6°20	23°15	0 ⁵⁵ 26	4°13	4°34	26°10	22°37	21°37	1°40	1°59	22°31	22° 5	S 19
M20	19 50 45	27°11'24	0 ¹² 52	7°39	24°28	1° 6	4°21	4°38	26° 9	22°36	21°38	1°41	1°55	22°37	22° 8	M20
T 21	19 54 41	28° 8'39	14°16	9° 2	25°40	1°46	4°29	4°42	26° 8	22°35	21°38	1°41	1°52	22°44	22°10	T 21
W22	19 58 38	29° 5'55	27°52	10°30	26°53	2°27	4°37	4°46	26° 8	22°34	21°39	1°41	1°49	22°51	22°12	W22
T 23	20 2 34	0 ¹² 3'12	11 ¹² 41	12° 2	28° 5	3° 7	4°46	4°51	26° 7	22°32	21°40	1°42	1°46	22°57	22°14	T 23
F 24	20 6 31	1° 0'29	25°42	13°38	29°18	3°48	4°54	4°55	26° 6	22°31	21°40	1°42	1°43	23° 4	22°16	F 24
S 25	20 10 28	1°57'48	9 ¹² 53	15°18	0 ¹¹ 30	4°28	5° 3	5° 0	26° 6	22°30	21°41	1°42	1°39	23°11	22°18	S 25
S 26	20 14 24	2°55'07	24°12	17° 2	1°42	5° 8	5°12	5° 4	26° 5	22°29	21°42	1°42	1°36	23°18	22°20	S 26
M27	20 18 21	3°52'28	8 ¹¹ 35	18°49	2°55	5°48	5°21	5° 9	26° 5	22°28	21°43	1°42	1°33	23°24	22°22	M27
T 28	20 22 17	4°49'49	23° 0	20°39	4° 7	6°28	5°30	5°14	26° 5	22°27	21°44	1°42	1°30	23°31	22°24	T 28
W29	20 26 14	5°47'12	7 ¹² 22	22°32	5°20	7° 8	5°39	5°19	26° 4	22°26	21°45	1°42	1°27	23°38	22°25	W29
T 30	20 30 10	6°44'35	21°36	24°28	6°32	7°48	5°48	5°24	26° 4	22°25	21°46	1°43	1°24	23°44	22°27	T 30
F 31	20 34 7	7 ¹² 41'59	5 ¹² 37	26 ⁵⁵ 26	7 ¹¹ 44	8 ¹² 28	5 ¹² 58	5 ¹² 29	26 ¹¹ 4	22 ¹² 23	21 ¹² 46	1°R43	1 ¹² 20	23 ¹¹ 51	22 ¹² 29	F 31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒	♓	♈	♉	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	decl	decl	decl	lat
W 1	23n 8	20n32	2s54	18n44	4s40	21n21	1n32	23n12	0n18	0n21	1n18	0n47	2n24	19s10	0n13	21s54	1n22	7n37	17n15	19n46	19n30	13s 8	15n56	2s14
T 2	23 4	21 8	1 42	18 47	4 37	21 5	1 33	23 16	0 18	0 18	1 18	0 46	2 24	19 10	0 13	21 54	1 22	7 36	17 14	19 46	19 31	13 10	15 56	2 14
F 3	22 59	20 19	0 25	18 50	4 33	20 49	1 34	23 20	0 19	0 15	1 17	0 45	2 24	19 10	0 13	21 54	1 22	7 36	17 13	19 47	19 32	13 12	15 57	2 14
S 4	22 54	18 15	0n52	18 55	4 28	20 32	1 35	23 24	0 20	0 13	1 17	0 44	2 23	19 9	0 13	21 54	1 22	7 35	17 13	19 47	19 32	13 14	15 57	2 15
S 5	22 49	15 13	2 4	19 1	4 22	20 15	1 35	23 28	0 20	0 10	1 17	0 42	2 23	19 9	0 13	21 54	1 22	7 35	17 12	19 46	19 33	13 16	15 58	2 15
M 6	22 43	11 28	3 7	19 9	4 15	19 57	1 36	23 31	0 21	0 7	1 17	0 41	2 23	19 9	0 13	21 54	1 22	7 34	17 12	19 46	19 34	13 18	15 59	2 15
T 7	22 37	7 19	3 59	19 17	4 7	19 38	1 36	23 34	0 22	0 5	1 17	0 40	2 23	19 8	0 13	21 54	1 22	7 34	17 11	19 46	19 35	13 20	15 59	2 15
W 8	22 31	2 57	4 38	19 27	3 58	19 19	1 37	23 37	0 22	0 2	1 16	0 38	2 23	19 8	0 13	21 54	1 21	7 33	17 11	19 46	19 35	13 22	16 0	2 15
T 9	22 24	1s25	5 3	19 37	3 48	18 59	1 37	23 40	0 23	0s 1	1 16	0 37	2 22	19 8	0 13	21 53	1 21	7 32	17 10	19 46	19 36	13 24	16 0	2 16
F 10	22 17	5 41	5 15	19 48	3 37	18 39	1 37	23 43	0 23	0 4	1 16	0 35	2 22	19 8	0 13	21 53	1 21	7 32	17 9	19 46	19 37	13 26	16 1	2 16
S 11	22 9	9 40	5 13	20 0	3 26	18 19	1 38	23 45	0 24	0 7	1 16	0 34	2 22	19 7	0 13	21 53	1 21	7 31	17 9	19 46	19 38	13 28	16 1	2 16
S 12	22 1	13 17	4 58	20 12	3 14	17 58	1 38	23 47	0 25	0 10	1 16	0 32	2 22	19 7	0 13	21 53	1 21	7 30	17 8	19 46	19 38	13 30	16 2	2 16
M13	21 52	16 23	4 30	20 25	3 2	17 36	1 38	23 49	0 25	0 13	1 15	0 30	2 22	19 7	0 13	21 53	1 21	7 30	17 8	19 46	19 39	13 32	16 2	2 16
T 14	21 44	18 49	3 50	20 37	2 49	17 14	1 38	23 50	0 26	0 16	1 15	0 29	2 21	19 7	0 13	21 53	1 21	7 29	17 7	19 47	19 40	13 34	16 2	2 17
W15	21 35	20 26	2 59	20 50	2 36	16 51	1 38	23 52	0 27	0 19	1 15	0 27	2 21	19 6	0 13	21 53	1 21	7 28	17 7	19 47	19 40	13 36	16 3	2 17
T 16	21 25	21 7	1 59	21 2	2 22	16 29	1 37	23 53	0 27	0 23	1 15	0 25	2 21	19 6	0 13	21 53	1 21	7 28	17 6	19 47	19 41	13 38	16 3	2 17
F 17	21 15	20 46	0 53	21 14	2 9	16 5	1 37	23 54	0 28	0 26	1 14	0 24	2 21	19 6	0 12	21 53	1 21	7 27	17 5	19 47	19 42	13 40	16 4	2 17
S 18	21 5	19 21	0s17	21 26	1 55	15 41	1 37	23 55	0 29	0 29	1 14	0 22	2 21	19 6	0 12	21 53	1 21	7 26	17 5	19 47	19 43	13 42	16 4	2 17
S 19	20 54	16 55	1 28	21 37	1 41	15 17	1 36	23 56	0 29	0 32	1 14	0 20	2 20	19 6	0 12	21 53	1 21	7 26	17 4	19 47	19 43	13 44	16 5	2 18
M20	20 43	13 35	2 35	21 47	1 27	14 53	1 36	23 56	0 30	0 36	1 14	0 18	2 20	19 5	0 12	21 53	1 21	7 25	17 4	19 47	19 44	13 46	16 5	2 18
T 21	20 32	9 30	3 35	21 55	1 13	14 28	1 35	23 56	0 31	0 39	1 14	0 16	2 20	19 5	0 12	21 53	1 21	7 24	17 3	19 47	19 45	13 48	16 5	2 18
W22	20 20	4 53	4 24	22 3	0 59	14 2	1 35	23 56	0 31	0 43	1 14	0 15	2 20	19 5	0 12	21 53	1 21	7 23	17 3	19 47	19 45	13 50	16 6	2 18
T 23	20 8	0n 3	4 58	22 9	0 45	13 37	1 34	23 56	0 32	0 46	1 13	0 13	2 20	19 5	0 12	21 53	1 21	7 22	17 2	19 47	19 46	13 52	16 6	2 18
F 24	19 56	5 2	5 15	22 13	0 32	13 11	1 33	23 56	0 32	0 50	1 13	0 11	2 19	19 5	0 12	21 53	1 21	7 22	17 1	19 47	19 47	13 54	16 6	2 19
S 25	19 43	9 49	5 14	22 15	0 19	12 44	1 32	23 55	0 33	0 53	1 13	0 9	2 19	19 5	0 12	21 53	1 21	7 21	17 1	19 47	19 47	13 56	16 6	2 19
S 26	19 30	14 5	4 53	22 15	0 6	12 17	1 31	23 54	0 34	0 57	1 13	0 7	2 19	19 5	0 12	21 53	1 21	7 20	17 0	19 47	19 48	13 58	16 7	2 19
M27	19 17	17 33	4 14	22 14	0n 6	11 50	1 30	23 53	0 34	1 1	1 13	0 5	2 19	19 5	0 12	21 53	1 21	7 19	17 0	19 47	19 49	14 0	16 7	2 19
T 28	19 3	19 57	3 19	22 9	0 18	11 23	1 29	23 52	0 35	1 5	1 12	0 3	2 19	19 4	0 12	21 53	1 21	7 18	16 59	19 47	19 50	14 2	16 7	2 19
W29	18 50	21 3	2 11	22 2	0 29	10 55	1 28	23 50	0 36	1 8	1 12	0 1	2 19	19 4	0 12	21 53	1 21	7 18	16 59	19 47	19 50	14 4	16 8	2 20
T 30	18 35	20 47	0 56	21 53	0 40	10 28	1 27	23 49	0 36	1 12	1 12	0s 2	2 18	19 4	0 12	21 53	1 21	7 17	16 58	19 47	19 51	14 6	16 8	2 20
F 31	18n21	19n13	0n22	21n41	0n50	9n59	1n25	23n47	0n37	1s16	1n12	0s 4	2n18	19s 4	0n12	21s53	1n21	7n16	16n58	19n47	19n52	14s 8	16n 8	2s20

ASTRODIENST EPHEMERIS for the year 1981

geocentric

AUGUST 1981

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 38 3	8♂39'24	19♂23	28♂26	8♂56	9♂8	6♂7	5♂34	26°R 3	22°R22	21♂47	1°R42	1♂17	23♂58	22♂30	S 1
S 2	20 42 0	9°36'50	2♂50	0♂28	10° 9	9°48	6°16	5°39	26♂3	22♂22	21°48	1♂42	1°14	24° 5	22°32	S 2
M 3	20 45 57	10°34'17	15°57	2°31	11°21	10°28	6°26	5°44	26° 3	22°21	21°50	1°41	1°11	24°11	22°33	M 3
T 4	20 49 53	11°31'44	28°44	4°35	12°33	11° 8	6°36	5°49	26°D 3	22°20	21°51	1°40	1° 8	24°18	22°35	T 4
W 5	20 53 50	12°29'12	11♂14	6°39	13°45	11°47	6°46	5°54	26° 3	22°19	21°52	1°38	1° 5	24°25	22°36	W 5
T 6	20 57 46	13°26'41	23°28	8°44	14°57	12°27	6°55	6° 0	26° 3	22°18	21°53	1°37	1° 1	24°31	22°37	T 6
F 7	21 1 43	14°24'10	5♂31	10°49	16° 9	13° 6	7° 5	6° 5	26° 3	22°17	21°54	1°36	0°58	24°38	22°39	F 7
S 8	21 5 39	15°21'41	17°26	12°53	17°21	13°46	7°15	6°11	26° 3	22°16	21°55	1°D36	0°55	24°45	22°40	S 8
S 9	21 9 36	16°19'12	29°19	14°57	18°33	14°25	7°26	6°16	26° 4	22°15	21°57	1°37	0°52	24°52	22°41	S 9
M10	21 13 32	17°16'44	11♂14	17° 0	19°45	15° 5	7°36	6°22	26° 4	22°15	21°58	1°38	0°49	24°58	22°42	M10
T 11	21 17 29	18°14'17	23°15	19° 3	20°57	15°44	7°46	6°27	26° 4	22°14	21°59	1°39	0°45	25° 5	22°43	T 11
W12	21 21 26	19°11'51	5♂27	21° 4	22° 9	16°23	7°57	6°33	26° 5	22°13	22° 0	1°40	0°42	25°12	22°44	W12
T 13	21 25 22	20° 9'26	17°52	23° 5	23°21	17° 3	8° 7	6°39	26° 5	22°13	22° 2	1°41	0°39	25°18	22°45	T 13
F 14	21 29 19	21° 7'02	0♂34	25° 4	24°32	17°42	8°18	6°45	26° 5	22°12	22° 3	1°R42	0°36	25°25	22°46	F 14
S 15	21 33 15	22° 4'39	13°34	27° 2	25°44	18°21	8°28	6°51	26° 6	22°11	22° 5	1°42	0°33	25°32	22°47	S 15
S 16	21 37 12	23° 2'17	26°52	28°58	26°56	19° 0	8°39	6°57	26° 7	22°11	22° 6	1°40	0°30	25°39	22°47	S 16
M17	21 41 8	23°59'56	10♂27	0♂54	28° 7	19°39	8°50	7° 3	26° 7	22°10	22° 7	1°38	0°26	25°45	22°48	M17
T 18	21 45 5	24°57'37	24°17	2°48	29°19	20°18	9° 1	7° 9	26° 8	22°10	22° 9	1°35	0°23	25°52	22°49	T 18
W19	21 49 1	25°55'20	8°Y18	4°40	0♂31	20°57	9°12	7°15	26° 9	22° 9	22°10	1°31	0°20	25°59	22°49	W19
T 20	21 52 58	26°53'03	22°28	6°31	1°42	21°36	9°23	7°21	26° 9	22° 9	22°12	1°28	0°17	26° 5	22°50	T 20
F 21	21 56 55	27°50'49	6♂41	8°21	2°54	22°15	9°34	7°27	26°10	22° 8	22°14	1°26	0°14	26°12	22°50	F 21
S 22	22 0 51	28°48'36	20°56	10° 9	4° 5	22°54	9°45	7°33	26°11	22° 8	22°15	1°24	0°11	26°19	22°51	S 22
S 23	22 4 48	29°46'25	5♂9	11°56	5°16	23°32	9°56	7°40	26°12	22° 7	22°17	1°D24	0° 7	26°25	22°51	S 23
M24	22 8 44	0♂44'16	19°17	13°42	6°28	24°11	10° 7	7°46	26°13	22° 7	22°18	1°25	0° 4	26°32	22°51	M24
T 25	22 12 41	1°42'09	3♂20	15°26	7°39	24°50	10°19	7°53	26°14	22° 7	22°20	1°27	0° 1	26°39	22°51	T 25
W26	22 16 37	2°40'03	17°16	17° 9	8°50	25°28	10°30	7°59	26°15	22° 6	22°22	1°28	29♂58	26°46	22°52	W26
T 27	22 20 34	3°37'59	1♂3	18°50	10° 1	26° 7	10°42	8° 5	26°16	22° 6	22°24	1°R29	29°55	26°52	22°52	T 27
F 28	22 24 30	4°35'57	14°39	20°31	11°13	26°45	10°53	8°12	26°17	22° 6	22°25	1°28	29°51	26°59	22°R52	F 28
S 29	22 28 27	5°33'56	28° 3	22°10	12°24	27°24	11° 5	8°19	26°19	22° 6	22°27	1°26	29°48	27° 6	22°52	S 29
S 30	22 32 24	6°31'57	11♂13	23°47	13°35	28° 2	11°17	8°25	26°20	22° 6	22°29	1°22	29°45	27°12	22°52	S 30
M31	22 36 20	7♂30'00	24♂9	25♂24	14♂46	28♂41	11♂28	8♂32	26♂21	22♂5	22♂31	1♂16	29♂42	27♂19	22♂51	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	18n 6	16n32	1n36	21n26	0n59	9n31	1n24	23n45	0n38	1s20	1n12	0s 6	2n18	19s 4	0n12	21s53
S 2	17 51	13 1	2 44	21 9	1 7	9 2	1 23	23 43	0 38	1 24	1 12	0 8	2 18	19 4	0 12	21 53
M 3	17 35	8 56	3 41	20 49	1 15	8 34	1 21	23 40	0 39	1 28	1 11	0 10	2 18	19 4	0 12	21 53
T 4	17 20	4 34	4 26	20 26	1 21	8 4	1 19	23 38	0 39	1 32	1 11	0 12	2 18	19 4	0 12	21 53
W 5	17 4	0 6	4 56	20 1	1 27	7 35	1 18	23 35	0 40	1 36	1 11	0 15	2 17	19 4	0 12	21 53
T 6	16 47	4s16	5 13	19 34	1 32	7 6	1 16	23 32	0 41	1 40	1 11	0 17	2 17	19 4	0 12	21 53
F 7	16 31	8 24	5 15	19 4	1 36	6 36	1 14	23 29	0 41	1 44	1 11	0 19	2 17	19 4	0 12	21 53
S 8	16 14	12 10	5 4	18 32	1 40	6 6	1 12	23 25	0 42	1 48	1 11	0 21	2 17	19 4	0 12	21 53
S 9	15 57	15 27	4 40	17 59	1 42	5 36	1 10	23 22	0 43	1 52	1 11	0 24	2 17	19 5	0 12	21 53
M10	15 39	18 6	4 4	17 24	1 44	5 6	1 8	23 18	0 43	1 56	1 10	0 26	2 17	19 5	0 12	21 53
T 11	15 22	20 0	3 17	16 47	1 45	4 36	1 6	23 14	0 44	2 0	1 10	0 29	2 16	19 5	0 12	21 53
W12	15 4	21 0	2 20	16 9	1 46	4 5	1 4	23 10	0 44	2 5	1 10	0 31	2 16	19 5	0 12	21 53
T 13	14 46	21 0	1 16	15 29	1 46	3 35	1 1	23 6	0 45	2 9	1 10	0 33	2 16	19 5	0 12	21 53
F 14	14 28	19 56	0 6	14 49	1 45	3 4	0 59	23 1	0 46	2 13	1 10	0 36	2 16	19 5	0 12	21 53
S 15	14 9	17 47	1s 5	14 7	1 43	2 34	0 57	22 57	0 46	2 18	1 10	0 38	2 16	19 5	0 12	21 53
S 16	13 50	14 39	2 14	13 25	1 41	2 3	0 54	22 52	0 47	2 22	1 10	0 41	2 16	19 5	0 12	21 53
M17	13 31	10 41	3 17	12 41	1 38	1 32	0 52	22 47	0 48	2 26	1 9	0 43	2 16	19 6	0 12	21 53
T 18	13 12	6 6	4 10	11 58	1 35	1 1	0 49	22 42	0 48	2 31	1 9	0 46	2 16	19 6	0 12	21 53
W19	12 53	1 7	4 48	11 13	1 32	0 30	0 46	22 37	0 49	2 35	1 9	0 48	2 15	19 6	0 12	21 53
T 20	12 33	3n57	5 10	10 29	1 28	0s 1	0 43	22 31	0 49	2 40	1 9	0 51	2 15	19 6	0 12	21 53
F 21	12 13	8 50	5 12	9 43	1 23	0 32	0 41	22 26	0 50	2 44	1 9	0 53	2 15	19 6	0 12	21 53
S 22	11 53	13 14	4 56	8 58	1 18	1 3	0 38	22 20	0 51	2 49	1 9	0 56	2 15	19 7	0 12	21 53
S 23	11 33	16 53	4 21	8 13	1 13	1 34	0 35	22 14	0 51	2 53	1 9	0 58	2 15	19 7	0 12	21 53
M24	11 13	19 31	3 31	7 27	1 7	2 5	0 32	22 8	0 52	2 58	1 8	1 1	2 15	19 7	0 12	21 53
T 25	10 52	20 56	2 28	6 41	1 2	2 36	0 29	22 1	0 53	3 2	1 8	1 4	2 15	19 7	0 12	21 53
W26	10 31	21 3	1 17	5 56	0 55	3 7	0 26	21 55	0 53	3 7	1 8	1 6	2 15	19 8	0 12	21 53
T 27	10 11	19 53	0 2	5 10	0 49	3 37	0 23	21 48	0 54	3 11	1 8	1 9	2 14	19 8	0 12	21 53
F 28	9 49	17 35	1n11	4 25	0 42	4 8	0 19	21 42	0 54	3 16	1 8	1 12	2 14	19 8	0 12	21 53
S 29	9 28	14 20	2 20	3 39	0 35	4 39	0 16	21 35	0 55	3 21	1 8	1 14	2 14	19 8	0 12	21 53
S 30	9 7	10 26	3 20	2 54	0 28	5 10	0 13	21 28	0 56	3 25	1 8	1 17	2 14	19 9	0 12	21 53
M31	8n45	6n 7	4n 8	2n 9	0n21	5s40	0n 9	21n21	0n56	3s30	1n 8	1s20	2n14	19s 9	0n12	21s53

Julian Day Number = 2444817.5, Delta T = 51.84 sec
 Ecliptic obliquity = 23°26'25, Nutation = - 0°00'13, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 24°28'59, Lahiri = 23°35'59

ASTRODIENST EPHEMERIS for the year 1981

geocentric

SEPTEMBER 1981

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	22 40 17	8♍28°04	6♌49	26♍59	15♌57	29♍19	11♌40	8♌39	26♍23	22°R 5	22♌33	1°R10	29♍39	27♍26	22°R51	T 1
W 2	22 44 13	9°26'09	19°14	28°33	17° 8	29°57	11°52	8°45	26°24	22°R 5	22°34	1♌ 3	29°36	27°33	22°R51	W 2
T 3	22 48 10	10°24'17	1♍26	0♌ 5	18°18	0♌35	12° 4	8°52	26°26	22°D 5	22°36	0°57	29°32	27°39	22°51	T 3
F 4	22 52 6	11°22'25	13°27	1°36	19°29	1°13	12°16	8°59	26°27	22° 5	22°38	0°52	29°29	27°46	22°50	F 4
S 5	22 56 3	12°20'35	25°22	3° 6	20°40	1°51	12°28	9° 6	26°29	22° 5	22°40	0°49	29°26	27°53	22°50	S 5
S 6	22 59 59	13°18'47	7♌13	4°35	21°51	2°29	12°40	9°13	26°30	22° 5	22°42	0°47	29°23	27°59	22°49	S 6
M 7	23 3 56	14°17'00	19° 6	6° 3	23° 1	3° 7	12°52	9°19	26°32	22° 5	22°44	0°D47	29°20	28° 6	22°49	M 7
T 8	23 7 53	15°15'15	1♌ 6	7°29	24°12	3°45	13° 4	9°26	26°34	22° 6	22°46	0°48	29°16	28°13	22°48	T 8
W 9	23 11 49	16°13'31	13°18	8°54	25°22	4°23	13°16	9°33	26°36	22° 6	22°48	0°49	29°13	28°19	22°47	W 9
T 10	23 15 46	17°11'48	25°47	10°17	26°33	5° 1	13°29	9°40	26°37	22° 6	22°50	0°R50	29°10	28°26	22°47	T 10
F 11	23 19 42	18°10'08	8♌36	11°40	27°43	5°38	13°41	9°47	26°39	22° 6	22°52	0°50	29° 7	28°33	22°46	F 11
S 12	23 23 39	19° 8'29	21°48	13° 1	28°53	6°16	13°53	9°54	26°41	22° 6	22°54	0°48	29° 4	28°40	22°45	S 12
S 13	23 27 35	20° 6'51	5♌24	14°20	0♍ 3	6°54	14° 6	10° 1	26°43	22° 7	22°56	0°44	29° 1	28°46	22°44	S 13
M14	23 31 32	21° 5'15	19°22	15°38	1°14	7°31	14°18	10° 8	26°45	22° 7	22°58	0°38	28°57	28°53	22°43	M14
T 15	23 35 28	22° 3'41	3♌38	16°54	2°24	8° 9	14°30	10°16	26°47	22° 7	23° 1	0°30	28°54	29° 0	22°42	T 15
W16	23 39 25	23° 2'09	18° 8	18° 9	3°34	8°46	14°43	10°23	26°49	22° 8	23° 3	0°22	28°51	29° 6	22°41	W16
T 17	23 43 21	24° 0'39	2♌44	19°22	4°43	9°23	14°55	10°30	26°51	22° 8	23° 5	0°14	28°48	29°13	22°40	T 17
F 18	23 47 18	24°59'12	17°20	20°34	5°53	10° 1	15° 8	10°37	26°53	22° 9	23° 7	0° 7	28°45	29°20	22°38	F 18
S 19	23 51 15	25°57'46	1♌49	21°43	7° 3	10°38	15°20	10°44	26°56	22° 9	23° 9	0° 3	28°42	29°27	22°37	S 19
S 20	23 55 11	26°56'23	16° 7	22°51	8°13	11°15	15°33	10°51	26°58	22°10	23°11	0° 1	28°38	29°33	22°36	S 20
M21	23 59 8	27°55'02	0♌12	23°57	9°22	11°52	15°46	10°59	27° 0	22°10	23°14	0°D 0	28°35	29°40	22°34	M21
T 22	0 3 4	28°53'43	14° 3	25° 0	10°32	12°30	15°58	11° 6	27° 3	22°11	23°16	0° 1	28°32	29°47	22°33	T 22
W23	0 7 1	29°52'27	27°40	26° 1	11°41	13° 7	16°11	11°13	27° 5	22°11	23°18	0°R 1	28°29	29°53	22°31	W23
T 24	0 10 57	0♌51'12	11♌ 5	27° 0	12°51	13°44	16°24	11°21	27° 7	22°12	23°20	0° 1	28°26	0♌ 0	22°30	T 24
F 25	0 14 54	1°50'00	24°18	27°56	14° 0	14°20	16°37	11°28	27°10	22°13	23°23	29♌58	28°22	0° 7	22°28	F 25
S 26	0 18 50	2°48'50	7♍19	28°48	15° 9	14°57	16°49	11°35	27°12	22°14	23°25	29°53	28°19	0°13	22°27	S 26
S 27	0 22 47	3°47'42	20° 9	29°38	16°18	15°34	17° 2	11°42	27°15	22°14	23°27	29°45	28°16	0°20	22°25	S 27
M28	0 26 44	4°46'37	2♌48	0♍25	17°27	16°11	17°15	11°50	27°17	22°15	23°29	29°35	28°13	0°27	22°23	M28
T 29	0 30 40	5°45'33	15°15	1° 7	18°36	16°48	17°28	11°57	27°20	22°16	23°32	29°23	28°10	0°34	22°21	T 29
W30	0 34 37	6♌44'31	27♌32	1♍46	19♍45	17♌24	17♌41	12♌ 4	27♍23	22°R17	23♌34	29♌10	28♌ 7	0♌40	22♌19	W30

Day	☉	☾		♀		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		♂		
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	8n24	1n37	4n43	1n25	0n14	6s11	0n 6	21n13	0n57	3s35	1n 8	1s22	2n14	19s 9	0n12	21s53	1n19	6n46	16n42	19n54	20n14	15s 9	16n 6	2s27						
W 2	8 2	2s51	5 3	0 40	0 6	6 41	0 3	21 6	0 57	3 39	1 8	1 25	2 14	19 10	0 12	21 53	1 19	6 45	16 42	19 56	20 14	15 11	16 6	2 28						
T 3	7 40	7 8	5 10	0s 4	0s 2	7 11	0s 1	20 58	0 58	3 44	1 7	1 28	2 14	19 10	0 12	21 53	1 19	6 43	16 42	19 57	20 15	15 13	16 6	2 28						
F 4	7 18	11 4	5 2	0 47	0 10	7 42	0 4	20 51	0 59	3 49	1 7	1 31	2 14	19 11	0 12	21 53	1 19	6 42	16 41	19 58	20 16	15 15	16 6	2 28						
S 5	6 56	14 32	4 42	1 30	0 17	8 12	0 8	20 43	0 59	3 54	1 7	1 33	2 14	19 11	0 11	21 53	1 19	6 41	16 41	19 59	20 16	15 16	16 5	2 28						
S 6	6 34	17 25	4 10	2 13	0 26	8 41	0 11	20 35	1 0	3 58	1 7	1 36	2 14	19 11	0 11	21 53	1 19	6 40	16 41	19 59	20 17	15 18	16 5	2 29						
M 7	6 11	19 34	3 26	2 55	0 34	9 11	0 15	20 27	1 1	4 3	1 7	1 39	2 14	19 12	0 11	21 53	1 19	6 39	16 40	19 59	20 18	15 20	16 4	2 29						
T 8	5 49	20 52	2 34	3 37	0 42	9 40	0 19	20 18	1 1	4 8	1 7	1 42	2 13	19 12	0 11	21 54	1 19	6 38	16 40	19 59	20 18	15 22	16 4	2 29						
W 9	5 26	21 14	1 33	4 18	0 50	10 10	0 22	20 10	1 2	4 13	1 7	1 44	2 13	19 13	0 11	21 54	1 19	6 37	16 40	19 59	20 19	15 24	16 4	2 29						
T 10	5 3	20 33	0 27	4 58	0 58	10 39	0 26	20 1	1 2	4 18	1 7	1 47	2 13	19 13	0 11	21 54	1 19	6 36	16 39	19 58	20 20	15 26	16 3	2 30						
F 11	4 41	18 47	0s42	5 38	1 7	11 8	0 30	19 53	1 3	4 22	1 7	1 50	2 13	19 13	0 11	21 54	1 19	6 35	16 39	19 58	20 20	15 28	16 3	2 30						
S 12	4 18	15 59	1 51	6 17	1 15	11 36	0 34	19 44	1 4	4 27	1 7	1 53	2 13	19 14	0 11	21 54	1 19	6 34	16 39	19 59	20 21	15 30	16 2	2 30						
S 13	3 55	12 15	2 55	6 56	1 23	12 5	0 37	19 35	1 4	4 32	1 7	1 56	2 13	19 14	0 11	21 54	1 19	6 33	16 38	20 0	20 21	15 31	16 2	2 30						
M14	3 32	7 45	3 51	7 33	1 31	12 33	0 41	19 26	1 5	4 37	1 6	1 59	2 13	19 15	0 11	21 54	1 19	6 32	16 38	20 1	20 22	15 33	16 1	2 30						
T 15	3 9	2 44	4 33	8 10	1 39	13 1	0 45	19 17	1 5	4 42	1 6	2 1	2 13	19 15	0 11	21 54	1 19	6 31	16 38	20 3	20 23	15 35	16 1	2 31						
W16	2 46	2n30	4 59	8 47	1 48	13 28	0 49	19 8	1 6	4 47	1 6	2 4	2 13	19 16	0 11	21 54	1 18	6 30	16 38	20 4	20 23	15 37	16 0	2 31						
T 17	2 23	7 38	5 5	9 22	1 56	13 56	0 53	18 59	1 7	4 52	1 6	2 7	2 13	19 16	0 11	21 54	1 18	6 29	16 37	20 6	20 24	15 39	16 0	2 31						
F 18	2 0	12 20	4 52	9 56	2 3	14 23	0 57	18 49	1 7	4 57	1 6	2 10	2 13	19 17	0 11	21 54	1 18	6 28	16 37	20 7	20 25	15 41	15 59	2 31						
S 19	1 36	16 16	4 20	10 30	2 11	14 49	1 1	18 40	1 8	5 1	1 6	2 13	2 13	19 17	0 11	21 54	1 18	6 27	16 37	20 8	20 25	15 42	15 59	2 32						
S 20	1 13	19 12	3 33	11 2	2 19	15 16	1 4	18 30	1 8	5 6	1 6	2 16	2 13	19 18	0 11	21 54	1 18	6 26	16 36	20 9	20 26	15 44	15 58	2 32						
M21	0 50	20 54	2 32	11 33	2 26	15 42	1 8	18 20	1 9	5 11	1 6	2 18	2 13	19 18	0 11	21 54	1 18	6 25	16 36	20 9	20 27	15 46	15 58	2 32						
T 22	0 26	21 18	1 24	12 4	2 34	16 7	1 12	18 10	1 10	5 16	1 6	2 21	2 13	19 19	0 11	21 55	1 18	6 24	16 36	20 9	20 27	15 48	15 57	2 32						
W23	0 3	20 25	0 13	12 33	2 41	16 33	1 16	18 0	1 10	5 21	1 6	2 24	2 13	19 20	0 11	21 55	1 18	6 23	16 36	20 9	20 28	15 50	15 57	2 33						
T 24	0s20	18 23	0n59	13 0	2 48	16 58	1 20	17 50	1 11	5 26	1 6	2 27	2 13	19 20	0 11	21 55	1 18	6 22	16 36	20 9	20 29	15 52	15 56	2 33						
F 25	0 44	15 24	2 6	13 27	2 54	17 23	1 24	17 40	1 12	5 31	1 6	2 30	2 13	19 21	0 11	21 55	1 18	6 21	16 35	20 9	20 29	15 54	15 55	2 33						
S 26	1 7	11 41	3 5	13 52	3 0	17 47	1 28	17 30	1 12	5 36	1 6	2 33	2 13	19 21	0 11	21 55	1 18	6 20	16 35	20 11	20 30	15 55	15 55	2 33						
S 27	1 31	7 29	3 54	14 15	3 6	18 11	1 32	17 20	1 13	5 41	1 6	2 36	2 13	19 22	0 11	21 55	1 18	6 19	16 35	20 12	20 31	15 57	15 54	2 33						
M28	1 54	3 1	4 30	14 36	3 12	18 34	1 35	17 9	1 13	5 46	1 6	2 38	2 13	19 23	0 11	21 55	1 18	6 18	16 35	20 14	20 31	15 59	15 54	2 34						
T 29	2 17	1s30	4 53	14 56	3 17	18 57	1 39	16 59	1 14	5 51	1 6	2 41	2 13	19 23	0 11	21 55	1 18	6 17	16 35	20 17	20 32	16 1	15 53	2 34						
W30	2s41	5s54	5n 2	15s14	3s21	19s20	1s43	16n48	1n15	5s56	1n 6	2s44	2n13	19s24	0n11	21s55	1n18	6n16	16n34	20n19	20n32	16s 3	15n52	2s34						

ASTRODIENST EPHEMERIS for the year 1981

geocentric

OCTOBER 1981

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 38 33	7♂43'31	9♂38	2♂20	20♂54	18♂1	17♂54	12♂12	27♂25	22♂18	23♂36	28♂R58	28♂3	0♂47	22♂R18	T 1
F 2	0 42 30	8°42'33	21°36	2°50	22°2	18°37	18°7	12°19	27°28	22°19	23°39	28°48	28°0	0°54	22°16	F 2
S 3	0 46 26	9°41'37	3♂27	3°14	23°11	19°14	18°20	12°27	27°31	22°19	23°41	28°40	27°57	1°0	22°14	S 3
S 4	0 50 23	10°40'43	15°16	3°33	24°19	19°50	18°33	12°34	27°34	22°20	23°43	28°34	27°54	1°7	22°12	S 4
M 5	0 54 19	11°39'50	27°7	3°45	25°28	20°26	18°45	12°41	27°36	22°21	23°46	28°32	27°51	1°14	22°9	M 5
T 6	0 58 16	12°39'00	8♂4	3°R51	26°36	21°2	18°58	12°49	27°39	22°22	23°48	28°D31	27°47	1°20	22°7	T 6
W 7	1 2 13	13°38'11	21°13	3°50	27°44	21°39	19°11	12°56	27°42	22°24	23°51	28°31	27°44	1°27	22°5	W 7
T 8	1 6 9	14°37'24	3♂39	3°42	28°52	22°15	19°24	13°3	27°45	22°25	23°53	28°R31	27°41	1°34	22°3	T 8
F 9	1 10 6	15°36'38	16°27	3°26	29°59	22°51	19°37	13°11	27°48	22°26	23°55	28°29	27°38	1°41	22°1	F 9
S 10	1 14 2	16°35'55	29°42	3°2	1♂8	23°27	19°50	13°18	27°51	22°27	23°58	28°26	27°35	1°47	21°58	S 10
S 11	1 17 59	17°35'13	13♂24	2°30	2°15	24°2	20°3	13°26	27°54	22°28	24°0	28°20	27°32	1°54	21°56	S 11
M12	1 21 55	18°34'33	27°35	1°50	3°22	24°38	20°16	13°33	27°57	22°29	24°2	28°12	27°28	2°1	21°53	M12
T 13	1 25 52	19°33'55	12♂10	1°1	4°30	25°14	20°30	13°40	28°0	22°31	24°5	28°1	27°25	2°7	21°51	T 13
W14	1 29 48	20°33'19	27°3	0°5	5°37	25°50	20°43	13°48	28°3	22°32	24°7	27°50	27°22	2°14	21°49	W14
T 15	1 33 45	21°32'45	12♂5	29♂3	6°44	26°25	20°56	13°55	28°7	22°33	24°10	27°39	27°19	2°21	21°46	T 15
F 16	1 37 41	22°32'13	27°5	27°55	7°51	27°1	21°9	14°2	28°10	22°34	24°12	27°29	27°16	2°27	21°43	F 16
S 17	1 41 38	23°31'44	11♂56	26°44	8°57	27°36	21°22	14°10	28°13	22°36	24°14	27°22	27°13	2°34	21°41	S 17
S 18	1 45 35	24°31'17	26°29	25°30	10°4	28°11	21°35	14°17	28°16	22°37	24°17	27°18	27°9	2°41	21°38	S 18
M19	1 49 31	25°30'52	10♂42	24°16	11°10	28°47	21°48	14°24	28°19	22°39	24°19	27°16	27°6	2°47	21°36	M19
T 20	1 53 28	26°30'29	24°34	23°5	12°16	29°22	22°1	14°31	28°23	22°40	24°22	27°16	27°3	2°54	21°33	T 20
W21	1 57 24	27°30'09	8♂5	21°57	13°22	29°57	22°14	14°39	28°26	22°41	24°24	27°16	27°0	3°1	21°30	W21
T 22	2 1 21	28°29'51	21°18	20°56	14°28	0♂32	22°27	14°46	28°29	22°43	24°26	27°14	26°57	3°8	21°27	T 22
F 23	2 5 17	29°29'35	4♂15	20°4	15°34	1°7	22°40	14°53	28°33	22°44	24°29	27°11	26°53	3°14	21°25	F 23
S 24	2 9 14	0♂29'21	16°58	19°20	16°39	1°42	22°53	15°0	28°36	22°46	24°31	27°5	26°50	3°21	21°22	S 24
S 25	2 13 10	1°29'10	29♂31	18°48	17°45	2°17	23°6	15°8	28°39	22°47	24°34	26°55	26°47	3°28	21°19	S 25
M26	2 17 7	2°29'01	11♂53	18°26	18°50	2°52	23°19	15°15	28°43	22°49	24°36	26°43	26°44	3°34	21°16	M26
T 27	2 21 4	3°28'53	24°7	18°D16	19°54	3°26	23°32	15°22	28°46	22°51	24°38	26°29	26°41	3°41	21°13	T 27
W28	2 25 0	4°28'48	6♂13	18°18	20°59	4°1	23°45	15°29	28°50	22°52	24°41	26°15	26°38	3°48	21°10	W28
T 29	2 28 57	5°28'45	18°12	18°30	22°3	4°35	23°57	15°36	28°53	22°54	24°43	26°1	26°34	3°54	21°7	T 29
F 30	2 32 53	6°28'43	0♂6	18°52	23°8	5°10	24°10	15°43	28°57	22°56	24°46	25°48	26°31	4°1	21°4	F 30
S 31	2 36 50	7♂28'44	11♂55	19♂25	24♂12	5♂44	24♂23	15♂50	29♂0	22♂57	24♂48	25♂39	26♂28	4♂8	21♂1	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	3s 4	10s 0	4n57	15s29	3s25	19s42	1s47	16n38	1n15	6s 1	1n 5	2s47	2n13	19s24	0n11	21s55
F 2	3 27	13 40	4 39	15 43	3 28	20 4	1 51	16 27	1 16	6 6	1 5	2 50	2 13	19 25	0 11	21 56
S 3	3 50	16 47	4 9	15 53	3 31	20 25	1 54	16 16	1 17	6 11	1 5	2 53	2 13	19 26	0 11	21 56
S 4	4 14	19 11	3 28	16 1	3 32	20 46	1 58	16 5	1 17	6 16	1 5	2 56	2 13	19 26	0 11	21 56
M 5	4 37	20 46	2 38	16 7	3 33	21 6	2 2	15 54	1 18	6 21	1 5	2 58	2 13	19 27	0 11	21 56
T 6	5 0	21 27	1 41	16 8	3 33	21 26	2 6	15 43	1 18	6 25	1 5	3 1	2 13	19 28	0 11	21 56
W 7	5 23	21 8	0 39	16 7	3 31	21 45	2 9	15 32	1 19	6 30	1 5	3 4	2 13	19 28	0 11	21 56
T 8	5 46	19 47	0s27	16 1	3 29	22 4	2 13	15 21	1 20	6 35	1 5	3 7	2 13	19 29	0 11	21 56
F 9	6 9	17 24	1 34	15 52	3 24	22 22	2 16	15 10	1 20	6 40	1 5	3 10	2 13	19 30	0 11	21 56
S 10	6 32	14 2	2 37	15 38	3 19	22 40	2 20	14 59	1 21	6 45	1 5	3 13	2 13	19 30	0 11	21 56
S 11	6 54	9 49	3 34	15 20	3 11	22 57	2 23	14 47	1 21	6 50	1 5	3 15	2 13	19 31	0 11	21 56
M12	7 17	4 55	4 19	14 57	3 2	23 14	2 27	14 36	1 22	6 55	1 5	3 18	2 13	19 32	0 11	21 57
T 13	7 39	0n22	4 49	14 30	2 51	23 30	2 30	14 25	1 23	7 0	1 5	3 21	2 13	19 32	0 11	21 57
W14	8 2	5 45	5 0	13 58	2 38	23 45	2 33	14 13	1 23	7 5	1 5	3 24	2 13	19 33	0 11	21 57
T 15	8 24	10 50	4 51	13 23	2 24	24 0	2 36	14 2	1 24	7 10	1 5	3 27	2 13	19 34	0 11	21 57
F 16	8 46	15 16	4 22	12 43	2 7	24 15	2 40	13 50	1 25	7 15	1 5	3 29	2 13	19 35	0 11	21 57
S 17	9 8	18 40	3 35	12 1	1 50	24 28	2 43	13 38	1 25	7 19	1 5	3 32	2 13	19 35	0 11	21 57
S 18	9 30	20 49	2 35	11 16	1 31	24 41	2 46	13 27	1 26	7 24	1 5	3 35	2 13	19 36	0 11	21 57
M19	9 52	21 34	1 26	10 30	1 11	24 54	2 49	13 15	1 27	7 29	1 5	3 38	2 13	19 37	0 11	21 57
T 20	10 14	20 59	0 14	9 45	0 50	25 6	2 51	13 3	1 27	7 34	1 5	3 41	2 13	19 38	0 11	21 58
W21	10 35	19 10	0n57	9 0	0 29	25 17	2 54	12 52	1 28	7 39	1 5	3 43	2 13	19 38	0 11	21 58
T 22	10 56	16 21	2 3	8 19	0 9	25 28	2 57	12 40	1 28	7 44	1 5	3 46	2 13	19 39	0 11	21 58
F 23	11 18	12 47	3 2	7 40	0n11	25 38	3 0	12 28	1 29	7 49	1 5	3 49	2 14	19 40	0 11	21 58
S 24	11 39	8 41	3 50	7 7	0 30	25 47	3 2	12 16	1 30	7 53	1 5	3 51	2 14	19 41	0 11	21 58
S 25	11 59	4 16	4 27	6 38	0 47	25 56	3 4	12 4	1 30	7 58	1 5	3 54	2 14	19 41	0 11	21 58
M26	12 20	0s15	4 50	6 15	1 3	26 4	3 7	11 52	1 31	8 3	1 5	3 57	2 14	19 42	0 11	21 58
T 27	12 41	4 43	4 59	5 58	1 17	26 12	3 9	11 40	1 32	8 8	1 5	3 59	2 14	19 43	0 11	21 58
W28	13 1	8 57	4 55	5 47	1 30	26 19	3 11	11 28	1 32	8 12	1 5	4 2	2 14	19 44	0 11	21 59
T 29	13 21	12 48	4 38	5 42	1 40	26 25	3 13	11 16	1 33	8 17	1 5	4 5	2 14	19 44	0 11	21 59
F 30	13 41	16 7	4 9	5 42	1 50	26 31	3 15	11 4	1 34	8 22	1 5	4 7	2 14	19 45	0 11	21 59
S 31	14s 0	18s46	3n29	5s48	1n57	26s36	3s17	10n52	1n34	8s27	1n 5	4s10	2n14	19s46	0n11	21s59

Julian Day Number = 2444878.5, Delta T = 51.97 sec
 Ecliptic obliquity = 23°26'26, Nutation = - 0°00'16, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 24°29'07, Lahiri = 23°36'08

ASTRODIENST EPHEMERIS for the year 1981

geocentric

NOVEMBER 1981

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 40 46	8♉28'46	23♊43	20♋6	25♌15	6♍18	24♎36	15♏57	29♐4	22♑59	24♒50	25°R32	26♓25	4♈15	20°R58	S 1
M 2	2 44 43	9°28'50	5♈33	20°55	26°19	6°53	24°49	16°4	29°7	23°1	24°53	25♈28	26°22	4°21	20♈55	M 2
T 3	2 48 39	10°28'55	17°28	21°51	27°22	7°27	25°2	16°11	29°11	23°3	24°55	25°26	26°19	4°28	20°52	T 3
W 4	2 52 36	11°29'02	29°34	22°53	28°25	8°1	25°15	16°18	29°14	23°4	24°57	25°D26	26°15	4°35	20°49	W 4
T 5	2 56 33	12°29'11	11♋56	24°1	29°27	8°34	25°27	16°25	29°18	23°6	25°0	25°R26	26°12	4°41	20°46	T 5
F 6	3 0 29	13°29'21	24°39	25°14	0♈29	9°8	25°40	16°32	29°22	23°8	25°2	25°25	26°9	4°48	20°43	F 6
S 7	3 4 26	14°29'32	7♉48	26°30	1°31	9°42	25°53	16°39	29°25	23°10	25°4	25°23	26°6	4°55	20°40	S 7
S 8	3 8 22	15°29'45	21°26	27°50	2°33	10°15	26°5	16°45	29°29	23°12	25°7	25°18	26°3	5°1	20°37	S 8
M 9	3 12 19	16°30'00	5♊34	29°13	3°34	10°49	26°18	16°52	29°32	23°14	25°9	25°11	25°59	5°8	20°34	M 9
T 10	3 16 15	17°30'16	20°12	0♉39	4°35	11°22	26°31	16°59	29°36	23°16	25°11	25°2	25°56	5°15	20°31	T 10
W 11	3 20 12	18°30'34	5♈12	2°6	5°36	11°55	26°43	17°6	29°40	23°17	25°13	24°52	25°53	5°21	20°28	W 11
T 12	3 24 8	19°30'53	20°27	3°35	6°36	12°29	26°56	17°12	29°43	23°19	25°16	24°42	25°50	5°28	20°25	T 12
F 13	3 28 5	20°31'14	5♊44	5°5	7°35	13°2	27°8	17°19	29°47	23°21	25°18	24°33	25°47	5°35	20°22	F 13
S 14	3 32 2	21°31'37	20°54	6°37	8°35	13°35	27°21	17°25	29°51	23°23	25°20	24°27	25°44	5°42	20°19	S 14
S 15	3 35 58	22°32'01	5♈47	8°9	9°34	14°7	27°33	17°32	29°54	23°25	25°22	24°23	25°40	5°48	20°15	S 15
M 16	3 39 55	23°32'28	20°16	9°42	10°32	14°40	27°46	17°38	29°58	23°27	25°24	24°D21	25°37	5°55	20°12	M 16
T 17	3 43 51	24°32'56	4♉19	11°16	11°30	15°13	27°58	17°45	0♈2	23°29	25°27	24°22	25°34	6°2	20°9	T 17
W 18	3 47 48	25°33'26	17°56	12°50	12°28	15°45	28°10	17°51	0°6	23°31	25°29	24°22	25°31	6°8	20°6	W 18
T 19	3 51 44	26°33'58	1♊9	14°24	13°25	16°18	28°23	17°57	0°9	23°34	25°31	24°R23	25°28	6°15	20°3	T 19
F 20	3 55 41	27°34'32	14°1	15°59	14°21	16°50	28°35	18°4	0°13	23°36	25°33	24°21	25°25	6°22	20°0	F 20
S 21	3 59 37	28°35'08	26°37	17°34	15°17	17°22	28°47	18°10	0°17	23°38	25°35	24°17	25°21	6°28	19°57	S 21
S 22	4 3 34	29°35'45	8♉58	19°9	16°13	17°54	28°59	18°16	0°20	23°40	25°37	24°11	25°18	6°35	19°54	S 22
M 23	4 7 31	0♈36'24	21°9	20°44	17°8	18°26	29°11	18°22	0°24	23°42	25°39	24°3	25°15	6°42	19°51	M 23
T 24	4 11 27	1°37'04	3♉12	22°19	18°2	18°58	29°23	18°28	0°28	23°44	25°41	23°53	25°12	6°48	19°48	T 24
W 25	4 15 24	2°37'46	15°9	23°53	18°56	19°30	29°35	18°34	0°32	23°46	25°43	23°42	25°9	6°55	19°45	W 25
T 26	4 19 20	3°38'29	27°2	25°28	19°49	20°1	29°47	18°40	0°35	23°48	25°46	23°32	25°5	7°2	19°42	T 26
F 27	4 23 17	4°39'14	8♈52	27°3	20°41	20°33	29°59	18°46	0°39	23°50	25°48	23°23	25°2	7°9	19°39	F 27
S 28	4 27 13	5°40'00	20°42	28°38	21°33	21°4	0♉11	18°52	0°43	23°53	25°49	23°16	24°59	7°15	19°36	S 28
S 29	4 31 10	6°40'48	2♈32	0♈12	22°24	21°35	0°22	18°58	0°46	23°55	25°51	23°11	24°56	7°22	19°33	S 29
M 30	4 35 6	7♈41'36	14♈25	1♈47	23♈14	22♉6	0♉34	19♉3	0♈50	23♈57	25♈53	23♈9	24♈53	7♈29	19♈30	M 30

Day	☉	☾	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	14s20	20s38	2n40	5s58	2n 3	26s40	3s19	10n40	1n35	8s31	1n 5	4s13	2n14	19s47	0n11	21s59	1n16	5n49	16n34	21n 2	20n52	17s 0	15n26	2s39	
M 2	14 39	21 36	1 43	6 12	2 7	26 44	3 20	10 28	1 36	8 36	1 5	4 15	2 14	19 47	0 11	21 59	1 16	5 49	16 34	21 3	20 53	17 1	15 25	2 40	
T 3	14 58	21 36	0 42	6 30	2 10	26 47	3 22	10 16	1 36	8 41	1 5	4 18	2 14	19 48	0 11	21 59	1 16	5 48	16 34	21 3	20 53	17 3	15 24	2 40	
W 4	15 17	20 36	0s22	6 51	2 12	26 49	3 23	10 4	1 37	8 45	1 5	4 20	2 15	19 49	0 11	21 59	1 16	5 47	16 34	21 3	20 54	17 5	15 23	2 40	
T 5	15 35	18 36	1 27	7 16	2 13	26 51	3 24	9 52	1 38	8 50	1 5	4 23	2 15	19 50	0 11	22 0	1 16	5 47	16 35	21 3	20 55	17 7	15 23	2 40	
F 6	15 53	15 38	2 29	7 42	2 12	26 52	3 25	9 40	1 38	8 54	1 5	4 25	2 15	19 51	0 11	22 0	1 16	5 46	16 35	21 3	20 55	17 8	15 22	2 40	
S 7	16 11	11 49	3 25	8 11	2 11	26 52	3 26	9 28	1 39	8 59	1 5	4 28	2 15	19 51	0 11	22 0	1 16	5 45	16 35	21 4	20 56	17 10	15 21	2 40	
S 8	16 29	7 15	4 12	8 42	2 9	26 52	3 27	9 15	1 40	9 4	1 5	4 30	2 15	19 52	0 10	22 0	1 16	5 45	16 35	21 5	20 56	17 12	15 20	2 40	
M 9	16 46	2 9	4 45	9 14	2 6	26 51	3 28	9 3	1 40	9 8	1 5	4 33	2 15	19 53	0 10	22 0	1 16	5 44	16 35	21 6	20 57	17 14	15 19	2 40	
T 10	17 3	3n14	5 2	9 47	2 3	26 50	3 28	8 51	1 41	9 13	1 6	4 35	2 15	19 54	0 10	22 0	1 16	5 43	16 35	21 8	20 58	17 15	15 18	2 41	
W 11	17 20	8 34	4 58	10 21	1 59	26 48	3 29	8 39	1 42	9 17	1 6	4 38	2 15	19 55	0 10	22 0	1 16	5 43	16 36	21 9	20 58	17 17	15 17	2 41	
T 12	17 37	13 28	4 33	10 55	1 54	26 45	3 29	8 27	1 42	9 22	1 6	4 40	2 16	19 55	0 10	22 0	1 16	5 42	16 36	21 11	20 59	17 19	15 16	2 41	
F 13	17 53	17 31	3 49	11 30	1 50	26 42	3 29	8 15	1 43	9 26	1 6	4 43	2 16	19 56	0 10	22 1	1 16	5 42	16 36	21 13	20 59	17 20	15 15	2 41	
S 14	18 9	20 20	2 48	12 5	1 44	26 38	3 29	8 3	1 44	9 30	1 6	4 45	2 16	19 57	0 10	22 1	1 16	5 41	16 36	21 14	21 0	17 22	15 14	2 41	
S 15	18 24	21 41	1 38	12 40	1 39	26 34	3 28	7 51	1 44	9 35	1 6	4 47	2 16	19 58	0 10	22 1	1 16	5 41	16 37	21 15	21 1	17 24	15 13	2 41	
M 16	18 40	21 33	0 22	13 15	1 33	26 29	3 28	7 39	1 45	9 39	1 6	4 50	2 16	19 59	0 10	22 1	1 16	5 40	16 37	21 15	21 1	17 25	15 13	2 41	
T 17	18 54	20 2	0n53	13 50	1 27	26 23	3 27	7 27	1 46	9 44	1 6	4 52	2 16	19 59	0 10	22 1	1 16	5 40	16 37	21 15	21 2	17 27	15 12	2 41	
W 18	19 9	17 24	2 3	14 25	1 20	26 17	3 26	7 15	1 46	9 48	1 6	4 54	2 16	20 0	0 10	22 1	1 16	5 39	16 37	21 15	21 2	17 29	15 11	2 41	
T 19	19 23	13 55	3 4	14 59	1 14	26 10	3 25	7 3	1 47	9 52	1 6	4 56	2 17	20 1	0 10	22 1	1 16	5 39	16 38	21 15	21 3	17 31	15 10	2 41	
F 20	19 37	9 53	3 54	15 33	1 7	26 3	3 24	6 51	1 48	9 56	1 6	4 59	2 17	20 2	0 10	22 1	1 16	5 38	16 38	21 15	21 4	17 32	15 9	2 41	
S 21	19 51	5 30	4 31	16 6	1 1	25 55	3 23	6 39	1 48	10 1	1 6	5 1	2 17	20 2	0 10	22 2	1 16	5 38	16 38	21 16	21 4	17 34	15 8	2 41	
S 22	20 4	0 58	4 55	16 39	0 54	25 47	3 21	6 27	1 49	10 5	1 6	5 3	2 17	20 3	0 10	22 2	1 16	5 37	16 38	21 17	21 5	17 36	15 7	2 41	
M 23	20 17	3s32	5 5	17 11	0 47	25 38	3 19	6 16	1 50	10 9	1 6	5 5	2 17	20 4	0 10	22 2	1 16	5 37	16 39	21 18	21 5	17 37	15 6	2 42	
T 24	20 29	7 51	5 2	17 42	0 40	25 29	3 17	6 4	1 51	10 13	1 6	5 7	2 17	20 5	0 10	22 2	1 16	5 36	16 39	21 20	21 6	17 39	15 6	2 42	
W 25	20 41	11 50	4 45	18 13	0 33	25 19	3 15	5 52	1 51	10 17	1 6	5 9	2 18	20 6	0 10	22 2	1 16	5 36	16 39	21 22	21 6	17 41	15 5	2 42	
T 26	20 53	15 21	4 16	18 43	0 26	25 9	3 13	5 40	1 52	10 22	1 6	5 12	2 18	20 6	0 10	22 2	1 16	5 36	16 40	21 23	21 7	17 42	15 4	2 42	
F 27	21 4	18 14	3 36	19 11	0 19	24 59	3 10	5 28	1 53	10 26	1 7	5 14	2 18	20 7	0 10	22 2	1 16	5 35	16 40	21 25	21 8	17 44	15 3	2 42	
S 28	21 15	20 21	2 46	19 40	0 12	24 48	3 7	5 17	1 53	10 30	1 7	5 16	2 18	20 8	0 10	22 2	1 16	5 35	16 40	21 26	21 8	17 46	15 2	2 42	
S 29	21 26	21 36	1 49	20 7	0 5	24 36	3 4	5 5	1 54	10 34	1 7	5 18	2 18	20 9	0 10	22 3	1 16	5 35	16 41	21 27	21 9	17 47	15 1	2 42	
M 30	21s36	21s53	0n47	20s33	0s 2	24s24	3s 1	4n54	1n55	10s38	1n 7	5s20	2n18	20s 9	0n10	22s 3	1n16	5n34	16n41	21n27	21n 9	17s49	15n 1	2s42	

ASTRODIENST EPHEMERIS for the year 1981

geocentric

DECEMBER 1981

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4 39 3	8°42'26	26°32'4	3°21'2	24°3'3	22°37'3	0°46'4	19°5'9	0°54'5	23°59'5	25°55'5	23°D 8	24°50'5	7°35'3	19°R27	T 1	
W 2	4 43 0	9°43'16	8°33'3	4°56'6	24°52'7	23°7'7	0°57'7	19°15'5	0°57'7	24°1'1	25°57'7	23°59'9	24°46'6	7°42'2	19°R24	W 2	
T 3	4 46 56	10°44'08	20°55'5	6°30'0	25°39'9	23°38'8	1°9'9	19°20'0	1°1'1	24°4'4	25°59'9	23°11'1	24°43'3	7°49'9	19°21'1	T 3	
F 4	4 50 53	11°45'00	3°35'5	8°4'4	26°26'6	24°8'8	1°20'0	19°26'6	1°5'5	24°6'6	26°1'1	23°12'2	24°40'0	7°55'5	19°19'9	F 4	
S 5	4 54 49	12°45'53	16°38'8	9°39'9	27°12'2	24°38'8	1°31'1	19°31'1	1°8'8	24°8'8	26°3'3	23°R12	24°37'7	8°2'2	19°16'6	S 5	
S 6	4 58 46	13°46'46	0°9'6	11°13'3	27°57'7	25°8'8	1°43'3	19°36'6	1°12'2	24°10'0	26°4'4	23°11'1	24°34'4	8°9'9	19°13'3	S 6	
M 7	5 2 42	14°47'41	14°3'3	12°47'7	28°41'1	25°38'8	1°54'4	19°41'1	1°16'6	24°13'3	26°6'6	23°8'8	24°31'1	8°15'5	19°10'0	M 7	
T 8	5 6 39	15°48'36	28°28'8	14°21'1	29°24'4	26°8'8	2°5'5	19°47'7	1°19'9	24°15'5	26°8'8	23°3'3	24°27'7	8°22'2	19°8'8	T 8	
W 9	5 10 35	16°49'32	13°8'17	15°56'6	0°55'5	26°38'8	2°16'6	19°52'2	1°23'3	24°17'7	26°10'0	22°58'8	24°24'4	8°29'9	19°5'5	W 9	
T 10	5 14 32	17°50'28	28°25'5	17°30'0	0°46'6	27°7'7	2°27'7	19°57'7	1°27'7	24°19'9	26°11'1	22°52'2	24°21'1	8°35'5	19°2'2	T 10	
F 11	5 18 29	18°51'26	13°11'41	19°4'4	1°25'5	27°36'6	2°38'8	20°2'2	1°30'0	24°22'2	26°13'3	22°48'8	24°18'8	8°42'2	19°0'0	F 11	
S 12	5 22 25	19°52'24	28°57'7	20°38'8	2°3'3	28°5'5	2°48'8	20°7'7	1°34'4	24°24'4	26°15'5	22°44'4	24°15'5	8°49'9	18°57'7	S 12	
S 13	5 26 22	20°53'24	14°58'0	22°13'3	2°40'0	28°34'4	2°59'9	20°11'1	1°37'7	24°26'6	26°16'6	22°42'2	24°11'1	8°56'6	18°55'5	S 13	
M14	5 30 18	21°54'24	28°43'3	23°47'7	3°15'5	29°3'3	3°10'0	20°16'6	1°41'1	24°28'8	26°18'8	22°D42	24°8'8	9°2'2	18°52'2	M14	
T 15	5 34 15	22°55'25	13°9'0	25°22'2	3°49'9	29°31'1	3°20'0	20°21'1	1°44'4	24°31'1	26°19'9	22°43'3	24°5'5	9°9'9	18°50'0	T 15	
W16	5 38 11	23°56'27	26°49'9	26°57'7	4°22'2	29°59'9	3°31'1	20°25'5	1°48'8	24°33'3	26°21'1	22°45'5	24°2'2	9°16'6	18°47'7	W16	
T 17	5 42 8	24°57'30	10°11'12	28°32'2	4°53'3	0°52'2	3°41'1	20°30'0	1°51'1	24°35'5	26°23'3	22°47'7	23°59'9	9°22'2	18°45'5	T 17	
F 18	5 46 5	25°58'33	23°9'9	0°3'7	5°22'2	0°56'6	3°51'1	20°34'4	1°55'5	24°37'7	26°24'4	22°R47	23°56'6	9°29'9	18°43'3	F 18	
S 19	5 50 1	26°59'38	5°45'5	1°42'2	5°50'0	1°24'4	4°2'2	20°39'9	1°58'8	24°40'0	26°25'5	22°47'7	23°52'2	9°36'6	18°40'0	S 19	
S 20	5 53 58	28°0'44	18°4'4	3°17'7	6°16'6	1°51'1	4°12'2	20°43'3	2°2'2	24°42'2	26°27'7	22°45'5	23°49'9	9°42'2	18°38'8	S 20	
M21	5 57 54	29°1'50	0°11'11	4°53'3	6°41'1	2°18'8	4°22'2	20°47'7	2°5'5	24°44'4	26°28'8	22°43'3	23°46'6	9°49'9	18°36'6	M21	
T 22	6 1 51	0°3'257	12°8'8	6°28'8	7°3'3	2°45'5	4°31'1	20°51'1	2°9'9	24°46'6	26°30'0	22°39'9	23°43'3	9°56'6	18°34'4	T 22	
W23	6 5 47	1°4'05	24°0'0	8°4'4	7°24'4	3°12'2	4°41'1	20°55'5	2°12'2	24°49'9	26°31'1	22°35'5	23°40'0	10°2'2	18°32'2	W23	
T 24	6 9 44	2°5'13	5°49'9	9°40'0	7°43'3	3°39'9	4°51'1	20°59'9	2°15'5	24°51'1	26°32'2	22°32'2	23°36'6	10°9'9	18°30'0	T 24	
F 25	6 13 40	3°6'22	17°39'9	11°16'6	7°59'9	4°5'5	5°0'0	21°3'3	2°19'9	24°53'3	26°33'3	22°28'8	23°33'3	10°16'6	18°28'8	F 25	
S 26	6 17 37	4°7'31	29°31'1	12°52'2	8°14'4	4°32'2	5°10'0	21°6'6	2°22'2	24°56'6	26°35'5	22°26'6	23°30'0	10°22'2	18°26'6	S 26	
S 27	6 21 34	5°8'41	11°3'27	14°29'9	8°26'6	4°58'8	5°19'9	21°10'0	2°25'5	24°58'8	26°36'6	22°25'5	23°27'7	10°29'9	18°24'4	S 27	
M28	6 25 30	6°9'51	23°29'9	16°5'5	8°36'6	5°23'3	5°29'9	21°14'4	2°29'9	25°0'0	26°37'7	22°D24	23°24'4	10°36'6	18°22'2	M28	
T 29	6 29 27	7°11'01	5°39'9	17°42'2	8°44'4	5°49'9	5°38'8	21°17'7	2°32'2	25°2'2	26°38'8	22°25'5	23°21'1	10°42'2	18°20'0	T 29	
W30	6 33 23	8°12'11	17°59'9	19°19'9	8°50'0	6°14'4	5°47'7	21°20'0	2°35'5	25°4'4	26°39'9	22°26'6	23°17'7	10°49'9	18°18'8	W30	
T 31	6 37 20	9°13'21	0°31'31	20°3'55	8°53'3	6°39'9	5°11'1	21°24'4	2°38'8	25°7'7	26°40'0	22°27'7	23°14'4	10°56'6	18°17'7	T 31	

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	21s45	21s10	0s18	20s58	0s 8	24s12	2s57	4n42	1n56	10s42	1n 7	5s22	2n19	20s10	0n10	22s 3	1n16
W 2	21 55	19 27	1 23	21 22	0 15	24 0	2 53	4 31	1 56	10 46	1 7	5 24	2 19	20 11	0 10	22 3	1 15
T 3	22 3	16 49	2 25	21 45	0 22	23 47	2 49	4 19	1 57	10 49	1 7	5 25	2 19	20 12	0 10	22 3	1 15
F 4	22 12	13 20	3 22	22 7	0 28	23 33	2 44	4 8	1 58	10 53	1 7	5 27	2 19	20 13	0 10	22 3	1 15
S 5	22 20	9 7	4 10	22 28	0 35	23 20	2 40	3 57	1 59	10 57	1 7	5 29	2 19	20 13	0 10	22 3	1 15
S 6	22 27	4 20	4 46	22 48	0 41	23 6	2 35	3 45	1 59	11 1	1 7	5 31	2 20	20 14	0 10	22 3	1 15
M 7	22 34	0n49	5 7	23 7	0 47	22 52	2 30	3 34	2 0	11 5	1 7	5 33	2 20	20 15	0 10	22 3	1 15
T 8	22 41	6 6	5 10	23 24	0 53	22 37	2 24	3 23	2 1	11 8	1 8	5 34	2 20	20 16	0 10	22 4	1 15
W 9	22 47	11 11	4 52	23 41	0 59	22 33	2 18	3 12	2 2	11 12	1 8	5 36	2 20	20 16	0 10	22 4	1 15
T 10	22 53	15 41	4 14	23 56	1 5	22 8	2 12	3 1	2 2	11 16	1 8	5 38	2 20	20 17	0 10	22 4	1 15
F 11	22 58	19 11	3 17	24 10	1 11	21 53	2 5	2 50	2 3	11 19	1 8	5 40	2 21	20 18	0 10	22 4	1 15
S 12	23 3	21 20	2 6	24 23	1 16	21 38	1 59	2 39	2 4	11 23	1 8	5 41	2 21	20 19	0 10	22 4	1 15
S 13	23 8	21 55	0 48	24 34	1 21	21 23	1 52	2 29	2 5	11 27	1 8	5 43	2 21	20 19	0 10	22 4	1 15
M14	23 12	20 57	0n33	24 44	1 26	21 7	1 44	2 18	2 6	11 30	1 8	5 44	2 21	20 20	0 10	22 4	1 15
T 15	23 15	18 39	1 49	24 53	1 31	20 51	1 36	2 7	2 6	11 33	1 8	5 46	2 21	20 21	0 10	22 4	1 15
W16	23 18	15 20	2 56	25 0	1 36	20 36	1 28	1 57	2 7	11 37	1 8	5 47	2 22	20 21	0 10	22 4	1 15
T 17	23 21	11 19	3 52	25 6	1 40	20 20	1 20	1 46	2 8	11 40	1 9	5 49	2 22	20 22	0 10	22 5	1 15
F 18	23 23	6 54	4 33	25 11	1 44	20 4	1 11	1 36	2 9	11 44	1 9	5 50	2 22	20 23	0 10	22 5	1 15
S 19	23 24	2 19	5 1	25 14	1 48	19 49	1 2	1 26	2 9	11 47	1 9	5 52	2 22	20 23	0 10	22 5	1 15
S 20	23 26	2s15	5 13	25 16	1 52	19 33	0 52	1 15	2 10	11 50	1 9	5 53	2 23	20 24	0 10	22 5	1 15
M21	23 26	6 40	5 12	25 16	1 55	19 17	0 42	1 5	2 11	11 53	1 9	5 54	2 23	20 25	0 10	22 5	1 15
T 22	23 26	10 46	4 57	25 15	1 58	19 2	0 32	0 55	2 12	11 57	1 9	5 56	2 23	20 26	0 10	22 5	1 15
W23	23 26	14 26	4 29	25 13	2 1	18 46	0 21	0 45	2 13	12 0	1 9	5 57	2 23	20 26	0 10	22 5	1 15
T 24	23 25	17 31	3 49	25 9	2 4	18 31	0 10	0 36	2 14	12 3	1 9	5 58	2 24	20 27	0 10	22 5	1 15
F 25	23 24	19 52	3 0	25 3	2 6	18 15	0n 1	0 26	2 14	12 6	1 10	5 59	2 24	20 28	0 10	22 5	1 15
S 26	23 23	21 23	2 3	24 56	2 7	18 0	0 13	0 16	2 15	12 9	1 10	6 1	2 24	20 28	0 10	22 5	1 15
S 27	23 20	21 57	1 0	24 47	2 9	17 45	0 25	0 7	2 16	12 12	1 10	6 2	2 24	20 29	0 10	22 5	1 15
M28	23 18	21 30	0s 6	24 37	2 10	17 30	0 38	0s 3	2 17	12 15	1 10	6 3	2 25	20 30	0 10	22 6	1 15
T 29	23 15	20 2	1 13	24 25	2 10	17 16	0 51	0 12	2 18	12 18	1 10	6 4	2 25	20 30	0 10	22 6	1 15
W30	23 11	17 37	2 17	24 12	2 10	17 2	1 4	0 21	2 19	12 21	1 10	6 5	2 25	20 31	0 10	22 6	1 15
T 31	23s 7	14s21	3s16	23s57	2s10	16s48	1n17	0s30	2n19	12s23	1n10	6s 6	2n25	20s31	0n10	22s 6	1n15

Julian Day Number = 2444939.5, Delta T = 52.10 sec
 Ecliptic obliquity = 23°26'26, Nutation = - 0°00'17, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 24°29'16, Lahiri = 23°36'16