



Astrodienst Ephemeris Tables for the year 1970

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 1970
geocentric

JANUARY 1970

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
T 1	6 40 55	10 ³ 9'23	10 ² 42	29 ³ 1	4 ³ 27	12 ¹ 14	2 ¹ 20	2°R 4	8 ² 43	29 ¹ 53	27°R 24	14°R 4	15 ¹ 17	2 ¹ 46	2 ¹ 31	T 1
F 2	6 44 52	11°10'32	23°26	29°31	5°43	12°59	2°28	2 ³ 3	8°44	29°55	27 ¹ 23	14 ¹ 3	15°14	2°53	2°32	F 2
S 3	6 48 49	12°11'42	6 ¹ 37	29°50	6°58	13°44	2°36	2° 3	8°45	29°57	27°23	14° 0	15°11	2°59	2°33	S 3
S 4	6 52 45	13°12'52	20°17	29°R 59	8°14	14°28	2°44	2°D 3	8°45	29°59	27°23	13°55	15° 8	3° 6	2°34	S 4
M 5	6 56 42	14°14'03	4 ² 27	29°58	9°29	15°13	2°51	2° 3	8°46	0 ² 0	27°23	13°47	15° 5	3°13	2°36	M 5
T 6	7 0 38	15°15'13	19° 5	29°44	10°45	15°58	2°59	2° 4	8°46	0° 2	27°23	13°38	15° 1	3°19	2°37	T 6
W 7	7 4 35	16°16'24	4 ³ 6	29°19	12° 0	16°43	3° 6	2° 4	8°46	0° 4	27°23	13°29	14°58	3°26	2°38	W 7
T 8	7 8 31	17°17'35	19°19	28°42	13°16	17°27	3°14	2° 4	8°47	0° 5	27°22	13°20	14°55	3°33	2°39	T 8
F 9	7 12 28	18°18'45	4 ² 35	27°54	14°31	18°12	3°21	2° 5	8°47	0° 7	27°22	13°13	14°52	3°39	2°41	F 9
S 10	7 16 24	19°19'55	19°42	26°55	15°47	18°57	3°28	2° 5	8°47	0° 9	27°22	13° 8	14°49	3°46	2°42	S 10
S 11	7 20 21	20°21'05	4 ¹ 32	25°48	17° 2	19°41	3°35	2° 6	8°47	0°10	27°21	13° 6	14°45	3°53	2°44	S 11
M 12	7 24 18	21°22'14	18°59	24°35	18°18	20°26	3°42	2° 7	8°47	0°12	27°21	13°D 6	14°42	3°59	2°45	M 12
T 13	7 28 14	22°23'22	3 ¹ 0	23°17	19°33	21°11	3°48	2° 8	8°R 48	0°14	27°20	13° 7	14°39	4° 6	2°47	T 13
W 14	7 32 11	23°24'30	16°36	21°58	20°49	21°55	3°55	2° 9	8°48	0°15	27°20	13° 8	14°36	4°13	2°48	W 14
T 15	7 36 7	24°25'37	29°49	20°39	22° 4	22°40	4° 1	2°10	8°47	0°17	27°19	13°R 8	14°33	4°19	2°50	T 15
F 16	7 40 4	25°26'43	12 ¹ 41	19°24	23°20	23°24	4° 7	2°12	8°47	0°18	27°19	13° 6	14°30	4°26	2°52	F 16
S 17	7 44 0	26°27'49	25°17	18°14	24°35	24° 9	4°13	2°13	8°47	0°20	27°18	13° 2	14°26	4°33	2°54	S 17
S 18	7 47 57	27°28'53	7 ¹ 39	17°10	25°50	24°54	4°19	2°14	8°47	0°21	27°18	12°56	14°23	4°39	2°55	S 18
M 19	7 51 53	28°29'57	19°50	16°15	27° 6	25°38	4°25	2°16	8°47	0°22	27°17	12°49	14°20	4°46	2°57	M 19
T 20	7 55 50	29°31'01	1 ² 53	15°28	28°21	26°23	4°31	2°18	8°46	0°24	27°16	12°40	14°17	4°53	2°59	T 20
W 21	7 59 47	0 ² 32'03	13°50	14°51	29°37	27° 7	4°36	2°20	8°46	0°25	27°16	12°32	14°14	4°59	3° 1	W 21
T 22	8 3 43	1°33'05	25°43	14°23	0 ² 52	27°51	4°41	2°22	8°45	0°26	27°15	12°24	14°11	5° 6	3° 3	T 22
F 23	8 7 40	2°34'06	7 ² 33	14° 4	2° 7	28°36	4°46	2°24	8°45	0°28	27°14	12°17	14° 7	5°13	3° 5	F 23
S 24	8 11 36	3°35'06	19°23	13°54	3°23	29°20	4°51	2°26	8°44	0°29	27°14	12°13	14° 4	5°20	3° 7	S 24
S 25	8 15 33	4°36'06	1 ¹ 13	13°D 52	4°38	0 ¹ 5	4°56	2°28	8°44	0°30	27°13	12°10	14° 1	5°26	3° 9	S 25
M 26	8 19 29	5°37'05	13° 6	13°59	5°54	0°49	5° 1	2°31	8°43	0°31	27°12	12°D 10	13°58	5°33	3°12	M 26
T 27	8 23 26	6°38'03	25° 6	14°12	7° 9	1°33	5° 5	2°33	8°42	0°33	27°11	12°10	13°55	5°40	3°14	T 27
W 28	8 27 22	7°39'00	7 ² 16	14°32	8°24	2°18	5° 9	2°36	8°42	0°34	27°10	12°12	13°51	5°46	3°16	W 28
T 29	8 31 19	8°39'57	19°40	14°59	9°40	3° 2	5°14	2°38	8°41	0°35	27° 9	12°14	13°48	5°53	3°18	T 29
F 30	8 35 16	9°40'53	2 ¹ 22	15°31	10°55	3°46	5°17	2°41	8°40	0°36	27° 8	12°15	13°45	6° 0	3°21	F 30
S 31	8 39 12	10 ² 41'48	15 ¹ 27	16 ³ 8	12 ² 10	4°Y 30	5 ¹ 21	2 ³ 44	8 ² 39	0 ² 37	27 ¹ 7	12°R 15	13 ¹ 42	6 ² 6	3°Y 23	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 3	6s20	2s17	20s51	0s31	23s38	0s16	7s43	0s49	11s 9	1n13	9n49	2s31	2s48
F 2	22 59	12 7	3 14	20 31	0 15	23 37	0 18	7 25	0 48	11 12	1 13	9 50	2 31	2 48
S 3	22 53	17 33	4 3	20 11	0n 1	23 36	0 20	7 7	0 46	11 14	1 13	9 50	2 31	2 48
S 4	22 47	22 18	4 39	19 52	0 18	23 34	0 23	6 49	0 45	11 17	1 13	9 50	2 31	2 48
M 5	22 41	25 58	5 1	19 35	0 36	23 31	0 25	6 30	0 44	11 19	1 13	9 50	2 30	2 49
T 6	22 34	28 8	5 3	19 19	0 55	23 28	0 27	6 12	0 43	11 22	1 13	9 51	2 30	2 49
W 7	22 27	28 8	4 45	19 6	1 14	23 24	0 30	5 54	0 42	11 24	1 14	9 51	2 30	2 49
T 8	22 20	26 8	4 7	18 55	1 33	23 19	0 32	5 35	0 41	11 26	1 14	9 51	2 29	2 49
F 9	22 12	22 13	3 11	18 46	1 52	23 13	0 34	5 17	0 40	11 29	1 14	9 52	2 29	2 49
S 10	22 3	16 51	2 2	18 39	2 10	23 7	0 36	4 58	0 39	11 31	1 14	9 52	2 29	2 49
S 11	21 54	10 34	0 46	18 35	2 27	23 0	0 38	4 40	0 38	11 33	1 14	9 53	2 29	2 49
M 12	21 45	3 53	0n32	18 33	2 43	22 52	0 40	4 21	0 37	11 35	1 15	9 54	2 28	2 49
T 13	21 35	2n48	1 45	18 33	2 56	22 43	0 43	4 3	0 36	11 37	1 15	9 54	2 28	2 49
W 14	21 25	9 9	2 50	18 34	3 7	22 34	0 45	3 44	0 35	11 39	1 15	9 55	2 28	2 49
T 15	21 14	14 55	3 45	18 38	3 16	22 24	0 47	3 26	0 34	11 41	1 15	9 55	2 27	2 49
F 16	21 3	19 52	4 56	18 42	3 22	22 14	0 49	3 7	0 33	11 43	1 15	9 56	2 27	2 49
S 17	20 52	23 50	4 24	18 48	3 26	22 2	0 51	2 49	0 32	11 45	1 15	9 57	2 27	2 49
S 18	20 40	26 38	5 7	18 55	3 27	21 51	0 52	2 30	0 31	11 47	1 16	9 58	2 26	2 49
M 19	20 28	28 8	5 6	19 2	3 26	21 38	0 54	2 11	0 30	11 48	1 16	9 59	2 26	2 49
T 20	20 15	28 17	4 51	19 11	3 24	21 25	0 56	1 53	0 29	11 50	1 16	9 59	2 26	2 48
W 21	20 2	27 6	4 24	19 19	3 19	21 11	0 58	1 34	0 28	11 52	1 16	10 0	2 26	2 48
T 22	19 49	24 41	3 45	19 28	3 13	20 56	1 0	1 16	0 27	11 53	1 16	10 1	2 25	2 48
F 23	19 35	21 14	2 57	19 38	3 5	20 41	1 1	0 57	0 26	11 55	1 17	10 2	2 25	2 48
S 24	19 21	16 56	2 1	19 47	2 57	20 26	1 3	0 38	0 25	11 56	1 17	10 3	2 25	2 47
S 25	19 7	11 58	0 59	19 56	2 48	20 9	1 5	0 20	0 24	11 58	1 17	10 4	2 24	2 47
M 26	18 52	6 34	0s 5	20 5	2 38	19 52	1 6	0 1	0 23	11 59	1 17	10 5	2 24	2 47
T 27	18 37	0 52	1 10	20 14	2 28	19 35	1 8	0n17	0 22	12 0	1 17	10 7	2 24	2 47
W 28	18 22	4s55	2 13	20 22	2 18	19 17	1 9	0 36	0 21	12 1	1 18	10 8	2 24	2 46
T 29	18 6	10 38	3 11	20 30	2 7	18 58	1 11	0 54	0 20	12 3	1 18	10 9	2 23	2 46
F 30	17 50	16 4	4 1	20 37	1 56	18 39	1 12	1 13	0 19	12 4	1 18	10 10	2 23	2 46
S 31	17s33	20s56	4s40	20s44	1n45	18s19	1s13	1n31	0s18	12s 5	1n18	10n11	2s23	2s45

Julian Day Number = 2440587.5, Delta T = 40.18 sec
Ecliptic obliquity = 23°26'44", Nutation = 0°00'05", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 24°19'17", Lahiri = 23°26'17"

ASTRODIENST EPHEMERIS for the year 1970

geocentric

FEBRUARY 1970

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 43 9	11°42'43	28°57	16°50	13°26	5°14	5°25	2°47	8°38	0°38	27°R 6	12°R14	13°39	6°13	3°26	S 1
M 2	8 47 5	12°43'37	12°55	17°36	14°41	5°59	5°28	2°50	8°37	0°39	27°R 5	12°36	13°36	6°20	3°28	M 2
T 3	8 51 2	13°44'31	27°20	18°26	15°56	6°43	5°31	2°53	8°36	0°40	27° 4	12° 8	13°32	6°26	3°30	T 3
W 4	8 54 58	14°45'23	12°59	19°20	17°12	7°27	5°35	2°57	8°35	0°41	27° 3	12° 3	13°29	6°33	3°33	W 4
T 5	8 58 55	15°46'15	27°16	20°17	18°27	8°11	5°37	3° 0	8°33	0°42	27° 2	12° 0	13°26	6°40	3°36	T 5
F 6	9 2 52	16°47'05	12°30	21°16	19°42	8°55	5°40	3° 4	8°32	0°43	27° 1	11°57	13°23	6°46	3°38	F 6
S 7	9 6 48	17°47'54	27°43	22°19	20°58	9°39	5°43	3° 7	8°31	0°43	27° 0	11°55	13°20	6°53	3°41	S 7
S 8	9 10 45	18°48'42	12°44	23°23	22°13	10°23	5°45	3°11	8°30	0°44	26°59	11°D54	13°17	7° 0	3°44	S 8
M 9	9 14 41	19°49'28	27°25	24°31	23°28	11° 7	5°47	3°15	8°28	0°45	26°57	11°55	13°13	7° 6	3°46	M 9
T 10	9 18 38	20°50'13	11°41	25°40	24°43	11°51	5°49	3°18	8°27	0°46	26°56	11°56	13°10	7°13	3°49	T 10
W11	9 22 34	21°50'56	25°30	26°51	25°59	12°35	5°51	3°22	8°25	0°46	26°55	11°57	13° 7	7°20	3°52	W11
T 12	9 26 31	22°51'38	8°52	28° 4	27°14	13°19	5°52	3°27	8°24	0°47	26°54	11°59	13° 4	7°26	3°55	T 12
F 13	9 30 27	23°52'18	21°50	29°18	28°29	14° 3	5°54	3°31	8°22	0°48	26°52	11°R59	13° 1	7°33	3°57	F 13
S 14	9 34 24	24°52'57	4°26	0°35	29°44	14°46	5°55	3°35	8°21	0°48	26°51	11°59	12°57	7°40	4° 0	S 14
S 15	9 38 20	25°53'34	16°45	1°52	0°59	15°30	5°56	3°39	8°19	0°49	26°50	11°58	12°54	7°46	4° 3	S 15
M16	9 42 17	26°54'09	28°52	3°12	2°14	16°14	5°57	3°44	8°17	0°50	26°48	11°56	12°51	7°53	4° 6	M16
T 17	9 46 14	27°54'42	10°49	4°32	3°30	16°57	5°57	3°48	8°15	0°50	26°47	11°54	12°48	8° 0	4° 9	T 17
W18	9 50 10	28°55'14	22°40	5°54	4°45	17°41	5°58	3°53	8°14	0°50	26°46	11°52	12°45	8° 6	4°12	W18
T 19	9 54 7	29°55'44	4°29	7°17	6° 0	18°25	5°58	3°57	8°12	0°51	26°44	11°50	12°42	8°13	4°15	T 19
F 20	9 58 3	0°56'12	16°18	8°41	7°15	19° 8	5°R58	4° 2	8°10	0°51	26°43	11°48	12°38	8°20	4°18	F 20
S 21	10 2 0	1°56'38	28°10	10° 7	8°30	19°52	5°58	4° 7	8° 8	0°52	26°41	11°48	12°35	8°26	4°21	S 21
S 22	10 5 56	2°57'03	10°6	11°33	9°45	20°35	5°58	4°12	8° 6	0°52	26°40	11°D47	12°32	8°33	4°24	S 22
M23	10 9 53	3°57'26	22° 9	13° 1	11° 0	21°19	5°57	4°17	8° 4	0°52	26°39	11°47	12°29	8°40	4°28	M23
T 24	10 13 49	4°57'48	4°20	14°30	12°15	22° 2	5°57	4°22	8° 2	0°53	26°37	11°48	12°26	8°46	4°31	T 24
W25	10 17 46	5°58'08	16°42	16° 0	13°30	22°46	5°56	4°27	8° 0	0°53	26°36	11°48	12°22	8°53	4°34	W25
T 26	10 21 43	6°58'27	29°16	17°31	14°45	23°29	5°55	4°32	7°58	0°53	26°34	11°49	12°19	9° 0	4°37	T 26
F 27	10 25 39	7°58'44	12°5	19° 2	16° 0	24°12	5°53	4°38	7°56	0°53	26°33	11°50	12°16	9° 6	4°40	F 27
S 28	10 29 36	8°59'00	25°12	20°36	17°15	24°56	5°52	4°43	7°54	0°53	26°31	11°50	12°13	9°13	4°44	S 28

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	17s17	24s53	5s 5	20s50	1n34	17s59	1s15	1n49	0s17	12s 6	1n19	10n13	2s22	2s45	0n44	18s39	1n40
M 2	17 0	27 32	5 13	20 55	1 23	17 38	1 16	2 8	0 16	12 7	1 19	10 14	2 22	2 44	0 44	18 39	1 41
T 3	16 42	28 28	5 3	20 59	1 13	17 17	1 17	2 26	0 15	12 8	1 19	10 15	2 22	2 44	0 44	18 39	1 41
W 4	16 25	27 24	4 32	21 2	1 2	16 55	1 18	2 44	0 14	12 8	1 19	10 17	2 22	2 43	0 44	18 39	1 41
T 5	16 7	24 20	3 41	21 4	0 52	16 33	1 19	3 3	0 13	12 9	1 19	10 18	2 21	2 43	0 44	18 40	1 41
F 6	15 49	19 32	2 35	21 5	0 41	16 11	1 20	3 21	0 12	12 10	1 20	10 20	2 21	2 42	0 44	18 40	1 41
S 7	15 30	13 29	1 17	21 5	0 31	15 47	1 21	3 39	0 11	12 10	1 20	10 21	2 21	2 42	0 44	18 40	1 41
S 8	15 11	6 43	0n 5	21 4	0 21	15 24	1 22	3 57	0 11	12 11	1 20	10 23	2 20	2 41	0 45	18 40	1 41
M 9	14 52	0n16	1 25	21 2	0 12	15 0	1 22	4 15	0 10	12 11	1 20	10 24	2 20	2 41	0 45	18 40	1 41
T 10	14 33	7 2	2 37	20 59	0 2	14 35	1 23	4 33	0 9	12 12	1 20	10 26	2 20	2 40	0 45	18 40	1 41
W11	14 14	13 15	3 38	20 54	0s 7	14 11	1 24	4 51	0 8	12 12	1 21	10 27	2 20	2 39	0 45	18 40	1 41
T 12	13 54	18 38	4 25	20 48	0 15	13 46	1 24	5 9	0 7	12 13	1 21	10 29	2 19	2 39	0 45	18 40	1 41
F 13	13 34	23 0	4 57	20 41	0 24	13 20	1 25	5 27	0 6	12 13	1 21	10 30	2 19	2 38	0 45	18 40	1 41
S 14	13 14	26 10	5 13	20 33	0 32	12 54	1 25	5 45	0 5	12 13	1 21	10 32	2 19	2 37	0 45	18 41	1 41
S 15	12 53	28 0	5 15	20 24	0 40	12 28	1 26	6 2	0 4	12 13	1 22	10 34	2 19	2 37	0 45	18 41	1 41
M16	12 33	28 29	5 2	20 13	0 48	12 1	1 26	6 20	0 4	12 13	1 22	10 36	2 18	2 36	0 45	18 41	1 41
T 17	12 12	27 36	4 37	20 2	0 55	11 34	1 27	6 37	0 3	12 13	1 22	10 37	2 18	2 35	0 45	18 41	1 41
W18	11 51	25 29	4 0	19 49	1 2	11 7	1 27	6 55	0 2	12 13	1 22	10 39	2 18	2 35	0 45	18 41	1 41
T 19	11 30	22 15	3 12	19 34	1 9	10 40	1 27	7 12	0 1	12 13	1 22	10 41	2 18	2 34	0 45	18 41	1 41
F 20	11 9	18 8	2 17	19 18	1 16	10 12	1 27	7 30	0 0	12 13	1 23	10 43	2 17	2 33	0 45	18 41	1 41
S 21	10 47	13 17	1 15	19 2	1 22	9 44	1 27	7 47	0n 1	12 13	1 23	10 45	2 17	2 32	0 45	18 41	1 42
S 22	10 25	7 55	0 9	18 43	1 27	9 16	1 27	8 4	0 1	12 12	1 23	10 46	2 17	2 32	0 45	18 41	1 42
M23	10 4	2 14	0s57	18 24	1 33	8 47	1 27	8 21	0 2	12 12	1 23	10 48	2 17	2 31	0 45	18 41	1 42
T 24	9 42	3s35	2 2	18 3	1 38	8 18	1 27	8 38	0 3	12 12	1 23	10 50	2 16	2 30	0 45	18 41	1 42
W25	9 19	9 22	3 2	17 41	1 43	7 49	1 27	8 55	0 4	12 11	1 24	10 52	2 16	2 29	0 45	18 41	1 42
T 26	8 57	14 52	3 54	17 18	1 47	7 20	1 26	9 12	0 5	12 11	1 24	10 54	2 16	2 28	0 45	18 41	1 42
F 27	8 35	19 50	4 36	16 53	1 51	6 51	1 26	9 28	0 5	12 10	1 24	10 56	2 16	2 28	0 45	18 41	1 42
S 28	8s12	23s59	5s 4	16s27	1s55	6s21	1s25	9n45	0n 6	12s 9	1n24	10n58	2s16	2s27	0n45	18s41	1n42

Julian Day Number = 2440618.5, Delta T = 40.26 sec
 Ecliptic obliquity = 23°26'44, Nutation = 0°00'06, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 24°19'21, Lahiri = 23°26'21

ASTRODIENST EPHEMERIS for the year 1970

geocentric

MARCH 1970

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 33 32	9♂59'14	8♂39	22♂10	18♂30	25♂39	5°R50	4♂48	7°R52	0♂53	26°R29	11°R50	12♂10	9♂20	4♂47	S 1
M 2	10 37 29	10°59'27	22°26	23°45	19°45	26°22	5♂49	4°54	7♂49	0°53	26♂28	11♂50	12° 7	9°26	4°50	M 2
T 3	10 41 25	11°59'39	6♂35	25°21	21° 0	27° 5	5°47	5° 0	7°47	0°R53	26°26	11°D50	12° 3	9°33	4°53	T 3
W 4	10 45 22	12°59'49	21° 4	26°58	22°14	27°48	5°44	5° 5	7°45	0°53	26°25	11°50	12° 0	9°40	4°57	W 4
T 5	10 49 18	13°59'57	5♂49	28°37	23°29	28°31	5°42	5°11	7°43	0°53	26°23	11°50	11°57	9°46	5° 0	T 5
F 6	10 53 15	15° 0'04	20°45	0♂16	24°44	29°14	5°40	5°17	7°40	0°53	26°22	11°50	11°54	9°53	5° 3	F 6
S 7	10 57 12	16° 0'09	5♂44	1°56	25°59	29°57	5°37	5°23	7°38	0°53	26°20	11°R50	11°51	10° 0	5° 7	S 7
S 8	11 1 8	17° 0'12	20°38	3°38	27°14	0♂40	5°34	5°29	7°36	0°53	26°18	11°50	11°48	10° 6	5°10	S 8
M 9	11 5 5	18° 0'13	5♂19	5°21	28°28	1°23	5°31	5°35	7°33	0°53	26°17	11°50	11°44	10°13	5°14	M 9
T 10	11 9 1	19° 0'12	19°40	7° 4	29°43	2° 6	5°28	5°41	7°31	0°53	26°15	11°49	11°41	10°20	5°17	T 10
W 11	11 12 58	20° 0'09	3♂36	8°49	0♂58	2°49	5°24	5°47	7°28	0°52	26°14	11°48	11°38	10°26	5°20	W 11
T 12	11 16 54	21° 0'04	17° 7	10°35	2°13	3°32	5°21	5°53	7°26	0°52	26°12	11°47	11°35	10°33	5°24	T 12
F 13	11 20 51	21°59'57	0♂13	12°23	3°27	4°15	5°17	5°59	7°23	0°52	26°10	11°46	11°32	10°40	5°27	F 13
S 14	11 24 47	22°59'48	12°55	14°11	4°42	4°57	5°13	6° 5	7°21	0°52	26° 9	11°46	11°28	10°46	5°31	S 14
S 15	11 28 44	23°59'36	25°17	16° 1	5°56	5°40	5° 9	6°12	7°19	0°51	26° 7	11°D45	11°25	10°53	5°34	S 15
M 16	11 32 41	24°59'23	7♂23	17°52	7°11	6°23	5° 4	6°18	7°16	0°51	26° 5	11°46	11°22	11° 0	5°38	M 16
T 17	11 36 37	25°59'07	19°19	19°43	8°26	7° 5	5° 0	6°25	7°13	0°50	26° 4	11°47	11°19	11° 6	5°41	T 17
W 18	11 40 34	26°58'48	1♂ 9	21°37	9°40	7°48	4°55	6°31	7°11	0°50	26° 2	11°48	11°16	11°13	5°45	W 18
T 19	11 44 30	27°58'28	12°57	23°31	10°55	8°30	4°51	6°38	7° 8	0°49	26° 1	11°49	11°13	11°20	5°48	T 19
F 20	11 48 27	28°58'05	24°48	25°26	12° 9	9°13	4°46	6°44	7° 6	0°49	25°59	11°51	11° 9	11°26	5°52	F 20
S 21	11 52 23	29°57'40	6♂44	27°23	13°24	9°55	4°41	6°51	7° 3	0°48	25°57	11°R51	11° 6	11°33	5°55	S 21
S 22	11 56 20	0♂57'13	18°48	29°21	14°38	10°38	4°36	6°58	7° 1	0°48	25°56	11°51	11° 3	11°40	5°59	S 22
M 23	12 0 16	1°56'44	1♂ 3	1♂19	15°52	11°20	4°30	7° 4	6°58	0°47	25°54	11°50	11° 0	11°46	6° 2	M 23
T 24	12 4 13	2°56'13	13°31	3°19	17° 7	12° 2	4°25	7°11	6°56	0°46	25°52	11°48	10°57	11°53	6° 6	T 24
W 25	12 8 10	3°55'40	26°11	5°19	18°21	12°45	4°19	7°18	6°53	0°46	25°51	11°45	10°54	12° 0	6° 9	W 25
T 26	12 12 6	4°55'05	9♂ 4	7°21	19°35	13°27	4°13	7°25	6°50	0°45	25°49	11°42	10°50	12° 6	6°13	T 26
F 27	12 16 3	5°54'28	22°11	9°23	20°50	14° 9	4° 7	7°32	6°48	0°44	25°48	11°38	10°47	12°13	6°16	F 27
S 28	12 19 59	6°53'49	5♂32	11°25	22° 4	14°51	4° 1	7°39	6°45	0°44	25°46	11°35	10°44	12°20	6°20	S 28
S 29	12 23 56	7°53'09	19° 6	13°28	23°18	15°33	3°55	7°46	6°43	0°43	25°44	11°32	10°41	12°26	6°23	S 29
M 30	12 27 52	8°52'27	2♂53	15°30	24°32	16°15	3°49	7°53	6°40	0°42	25°43	11°D31	10°38	12°33	6°27	M 30
T 31	12 31 49	9♂51'43	16♂54	17♂33	25♂47	16♂57	3♂43	8♂ 0	6♂37	0♂41	25♂41	11♂31	10♂34	12♂40	6♂30	T 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
S 1	7s50	26s58	5s17	16s 0	1s59	5s51	1s25	10n 1	0n 7	12s 9	1n25	11n 0	2s15	2s26	0n45	18s41
M 2	7 27	28 26	5 12	15 31	2 2	5 21	1 24	10 18	0 8	12 8	1 25	11 2	2 15	2 25	0 45	18 41
T 3	7 4	28 5	4 49	15 1	2 4	4 51	1 24	10 34	0 9	12 7	1 25	11 4	2 15	2 24	0 45	18 41
W 4	6 41	25 51	4 6	14 30	2 6	4 21	1 23	10 50	0 9	12 6	1 25	11 6	2 15	2 23	0 45	18 41
T 5	6 18	21 51	3 7	13 58	2 8	3 51	1 22	11 6	0 10	12 5	1 25	11 8	2 15	2 22	0 45	18 41
F 6	5 55	16 23	1 55	13 24	2 10	3 20	1 22	11 22	0 11	12 4	1 25	11 10	2 14	2 21	0 45	18 40
S 7	5 31	9 56	0 34	12 49	2 11	2 50	1 21	11 38	0 12	12 3	1 26	11 13	2 14	2 20	0 45	18 40
S 8	5 8	2 58	0n49	12 13	2 11	2 19	1 20	11 54	0 12	12 2	1 26	11 15	2 14	2 19	0 45	18 40
M 9	4 45	4n 3	2 7	11 35	2 11	1 49	1 19	12 10	0 13	12 1	1 26	11 17	2 14	2 18	0 45	18 40
T 10	4 21	10 42	3 15	10 57	2 11	1 18	1 18	12 25	0 14	11 59	1 26	11 19	2 14	2 17	0 45	18 40
W 11	3 58	16 38	4 10	10 17	2 10	0 47	1 17	12 41	0 14	11 58	1 26	11 21	2 13	2 17	0 45	18 40
T 12	3 34	21 33	4 48	9 35	2 9	0 16	1 15	12 56	0 15	11 57	1 27	11 23	2 13	2 16	0 45	18 40
F 13	3 10	25 15	5 11	8 53	2 7	0n14	1 14	13 11	0 16	11 55	1 27	11 26	2 13	2 15	0 45	18 40
S 14	2 47	27 36	5 17	8 9	2 5	0 45	1 13	13 26	0 17	11 54	1 27	11 28	2 13	2 14	0 45	18 40
S 15	2 23	28 30	5 8	7 24	2 3	1 16	1 12	13 41	0 17	11 52	1 27	11 30	2 13	2 13	0 45	18 40
M 16	1 59	28 0	4 46	6 38	1 59	1 47	1 10	13 56	0 18	11 51	1 27	11 32	2 12	2 12	0 45	18 39
T 17	1 36	26 12	4 12	5 51	1 56	2 17	1 9	14 11	0 19	11 49	1 27	11 35	2 12	2 11	0 45	18 39
W 18	1 12	23 16	3 27	5 2	1 52	2 48	1 7	14 25	0 19	11 47	1 28	11 37	2 12	2 10	0 45	18 39
T 19	0 48	19 23	2 33	4 13	1 47	3 19	1 6	14 39	0 20	11 46	1 28	11 39	2 12	2 9	0 45	18 39
F 20	0 25	14 43	1 33	3 22	1 42	3 49	1 4	14 54	0 21	11 44	1 28	11 42	2 12	2 8	0 45	18 39
S 21	0 1	9 29	0 28	2 30	1 36	4 20	1 2	15 8	0 21	11 42	1 28	11 44	2 12	2 7	0 45	18 39
S 22	0n23	3 51	0s38	1 38	1 30	4 50	1 1	15 22	0 22	11 40	1 28	11 46	2 11	2 6	0 45	18 38
M 23	0 46	2s 1	1 44	0 44	1 23	5 21	0 59	15 36	0 23	11 38	1 28	11 49	2 11	2 5	0 45	18 38
T 24	1 10	7 53	2 46	0n10	1 15	5 51	0 57	15 49	0 23	11 36	1 28	11 51	2 11	2 3	0 45	18 38
W 25	1 34	13 32	3 40	1 5	1 7	6 21	0 55	16 3	0 24	11 34	1 29	11 53	2 11	2 2	0 45	18 38
T 26	1 57	18 42	4 25	2 1	0 59	6 51	0 53	16 16	0 24	11 32	1 29	11 56	2 11	2 1	0 45	18 38
F 27	2 21	23 5	4 56	2 57	0 50	7 20	0 51	16 29	0 25	11 30	1 29	11 58	2 11	2 0	0 45	18 38
S 28	2 44	26 21	5 12	3 53	0 41	7 50	0 49	16 42	0 26	11 28	1 29	12 0	2 11	1 59	0 45	18 37
S 29	3 8	28 10	5 11	4 50	0 31	8 20	0 47	16 55	0 26	11 26	1 29	12 3	2 10	1 58	0 45	18 37
M 30	3 31	28 17	4 53	5 47	0 21	8 49	0 45	17 8	0 27	11 24	1 29	12 5	2 10	1 57	0 45	18 37
T 31	3n54	26s37	4s16	6n44	0s10	9n18	0s43	17n21	0n28	11s22	1n29	12n 8	2s10	1s56	0n45	18s37

Julian Day Number = 2440646.5, Delta T = 40.34 sec
 Ecliptic obliquity = 23°26'44", Nutation = 0°00'06", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 24°19'25", Lahiri = 23°26'25"

ASTRODIENST EPHEMERIS for the year 1970

geocentric

APRIL 1970

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	12 35 45	10°50'58	1° 7	19°34	27° 1	17°39	3°R36	8° 7	6°R35	0°R40	25°R40	11°32	10°31	12°46	6°34	W 1
T 2	12 39 42	11°50'10	15°29	21°35	28°15	18°21	3°M30	8°14	6°32	0°39	25°38	11°34	10°28	12°53	6°37	T 2
F 3	12 43 39	12°49'21	29°59	23°35	29°29	19° 3	3°23	8°21	6°30	0°38	25°37	11°35	10°25	13° 0	6°41	F 3
S 4	12 47 35	13°48'30	14°33	25°34	0°43	19°45	3°16	8°29	6°27	0°37	25°35	11°R35	10°22	13° 6	6°44	S 4
S 5	12 51 32	14°47'37	29° 5	27°30	1°57	20°27	3° 9	8°36	6°24	0°36	25°34	11°34	10°19	13°13	6°48	S 5
M 6	12 55 28	15°46'42	13°29	29°24	3°11	21° 9	3° 2	8°43	6°22	0°35	25°32	11°31	10°15	13°20	6°51	M 6
T 7	12 59 25	16°45'45	27°39	1°16	4°25	21°51	2°55	8°51	6°19	0°34	25°31	11°27	10°12	13°26	6°55	T 7
W 8	13 3 21	17°44'46	11°31	3° 4	5°39	22°32	2°48	8°58	6°17	0°33	25°29	11°21	10° 9	13°33	6°58	W 8
T 9	13 7 18	18°43'45	25° 1	4°49	6°53	23°14	2°41	9° 5	6°14	0°32	25°28	11°15	10° 6	13°40	7° 2	T 9
F 10	13 11 14	19°42'42	8° 8	6°30	8° 7	23°56	2°34	9°13	6°12	0°31	25°26	11° 9	10° 3	13°46	7° 5	F 10
S 11	13 15 11	20°41'37	20°53	8° 8	9°21	24°37	2°26	9°20	6° 9	0°30	25°25	11° 4	9°59	13°53	7° 9	S 11
S 12	13 19 8	21°40'29	3°18	9°41	10°34	25°19	2°19	9°28	6° 7	0°29	25°23	11° 1	9°56	14° 0	7°12	S 12
M13	13 23 4	22°39'19	15°27	11° 9	11°48	26° 0	2°11	9°35	6° 4	0°28	25°22	10°59	9°53	14° 6	7°16	M13
T 14	13 27 1	23°38'07	27°24	12°33	13° 2	26°42	2° 4	9°43	6° 2	0°26	25°20	10°D59	9°50	14°13	7°19	T 14
W15	13 30 57	24°36'53	9°14	13°51	14°16	27°23	1°56	9°50	5°59	0°25	25°19	11° 0	9°47	14°20	7°23	W15
T 16	13 34 54	25°35'36	21° 3	15° 5	15°29	28° 5	1°49	9°58	5°57	0°24	25°18	11° 1	9°44	14°26	7°26	T 16
F 17	13 38 50	26°34'17	2°55	16°13	16°43	28°46	1°41	10° 5	5°55	0°23	25°16	11° 2	9°40	14°33	7°29	F 17
S 18	13 42 47	27°32'56	14°56	17°16	17°57	29°27	1°34	10°13	5°52	0°21	25°15	11°R 3	9°37	14°40	7°33	S 18
S 19	13 46 43	28°31'32	27° 8	18°13	19°10	0°II 9	1°26	10°20	5°50	0°20	25°14	11° 1	9°34	14°46	7°36	S 19
M20	13 50 40	29°30'07	9°25	19° 5	20°24	0°50	1°18	10°28	5°48	0°19	25°12	10°58	9°31	14°53	7°39	M20
T 21	13 54 36	0°32'48	22°38	19°51	21°37	1°31	1°11	10°36	5°45	0°17	25°11	10°52	9°28	14°59	7°43	T 21
W22	13 58 33	1°27'10	5°19	20°31	22°51	2°12	1° 3	10°43	5°43	0°16	25°10	10°45	9°25	15° 6	7°46	W22
T 23	14 2 30	2°25'39	18°36	21° 5	24° 4	2°53	0°55	10°51	5°41	0°15	25° 9	10°36	9°21	15°13	7°49	T 23
F 24	14 6 26	3°24'06	2° 8	21°33	25°17	3°34	0°48	10°59	5°39	0°13	25° 7	10°27	9°18	15°19	7°52	F 24
S 25	14 10 23	4°22'32	15°52	21°56	26°31	4°15	0°40	11° 6	5°36	0°12	25° 6	10°19	9°15	15°26	7°56	S 25
S 26	14 14 19	5°20'56	29°45	22°12	27°44	4°56	0°32	11°14	5°34	0°10	25° 5	10°12	9°12	15°33	7°59	S 26
M27	14 18 16	6°19'18	13°45	22°23	28°57	5°37	0°25	11°22	5°32	0° 9	25° 4	10° 8	9° 9	15°39	8° 2	M27
T 28	14 22 12	7°17'39	27°49	22°R29	0°II 11	6°18	0°17	11°29	5°30	0° 8	25° 3	10° 6	9° 5	15°46	8° 5	T 28
W29	14 26 9	8°15'58	11°56	22°28	1°24	6°59	0°10	11°37	5°28	0° 6	25° 2	10°D 5	9° 2	15°53	8° 9	W29
T 30	14 30 6	9°14'16	26° 6	22°23	2°II 37	7°II 40	0°M 2	11°45	5°26	0° 5	25° 1	10°H 6	8°H 59	15°59	8°Y 12	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	4n18	23s14	3s24	7n40	0n 1	9n47	0s41	17n33	0n28	11s19	1n29	12n10	2s10	1s55	0n45	18s37	1n44	16n36	16n15	7s14	7s37	19n17	4n57	2n33	
T 2	4 41	18 24	2 18	8 36	0 12	10 15	0 39	17 45	0 29	11 17	1 29	12 12	2 10	1 54	0 45	18 36	1 44	16 36	16 15	7 14	7 39	19 14	4 58	2 33	
F 3	5 4	12 28	1 3	9 31	0 23	10 44	0 36	17 58	0 29	11 15	1 29	12 15	2 10	1 53	0 45	18 36	1 44	16 37	16 15	7 13	7 40	19 12	4 59	2 33	
S 4	5 27	5 50	0n16	10 26	0 35	11 12	0 34	18 10	0 30	11 12	1 29	12 17	2 10	1 52	0 45	18 36	1 44	16 37	16 15	7 13	7 41	19 9	5 1	2 33	
S 5	5 50	1n 4	1 34	11 19	0 47	11 40	0 32	18 21	0 30	11 10	1 30	12 20	2 10	1 51	0 45	18 36	1 44	16 38	16 15	7 14	7 42	19 6	5 2	2 33	
M 6	6 13	7 52	2 45	12 10	0 58	12 7	0 29	18 33	0 31	11 7	1 30	12 22	2 9	1 50	0 45	18 35	1 44	16 38	16 15	7 15	7 43	19 4	5 3	2 33	
T 7	6 35	14 8	3 45	13 0	1 10	12 34	0 27	18 44	0 32	11 5	1 30	12 24	2 9	1 49	0 45	18 35	1 44	16 39	16 14	7 16	7 45	19 1	5 5	2 33	
W 8	6 58	19 34	4 30	13 48	1 21	13 1	0 24	18 56	0 32	11 3	1 30	12 27	2 9	1 48	0 45	18 35	1 44	16 39	16 14	7 18	7 46	18 58	5 6	2 33	
T 9	7 20	23 51	4 58	14 34	1 32	13 28	0 22	19 7	0 33	11 0	1 30	12 29	2 9	1 47	0 45	18 35	1 44	16 40	16 14	7 21	7 47	18 56	5 8	2 32	
F 10	7 43	26 46	5 10	15 18	1 42	13 54	0 20	19 18	0 33	10 58	1 30	12 32	2 9	1 46	0 45	18 34	1 44	16 40	16 14	7 23	7 48	18 53	5 9	2 32	
S 11	8 5	28 13	5 6	16 0	1 52	14 20	0 17	19 29	0 34	10 55	1 30	12 34	2 9	1 45	0 45	18 34	1 44	16 41	16 14	7 25	7 49	18 50	5 10	2 32	
S 12	8 27	28 12	4 48	16 39	2 2	14 46	0 15	19 39	0 34	10 52	1 30	12 37	2 9	1 44	0 45	18 34	1 44	16 41	16 14	7 26	7 51	18 48	5 12	2 32	
M13	8 49	26 48	4 16	17 15	2 11	15 11	0 12	19 50	0 35	10 50	1 30	12 39	2 9	1 43	0 45	18 33	1 44	16 41	16 13	7 27	7 52	18 45	5 13	2 32	
T 14	9 11	24 11	3 35	17 49	2 19	15 36	0 9	20 0	0 35	10 47	1 30	12 42	2 9	1 42	0 45	18 33	1 44	16 42	16 13	7 27	7 53	18 42	5 14	2 32	
W15	9 32	20 35	2 44	18 20	2 27	16 1	0 7	20 10	0 36	10 45	1 30	12 44	2 9	1 41	0 45	18 33	1 44	16 42	16 13	7 27	7 54	18 39	5 16	2 32	
T 16	9 54	16 10	1 46	18 48	2 33	16 25	0 4	20 20	0 36	10 42	1 30	12 46	2 8	1 41	0 45	18 33	1 44	16 43	16 13	7 26	7 55	18 37	5 17	2 32	
F 17	10 15	11 7	0 44	19 14	2 39	16 49	0 2	20 29	0 37	10 39	1 30	12 49	2 8	1 40	0 45	18 32	1 44	16 43	16 13	7 26	7 57	18 34	5 18	2 32	
S 18	10 36	5 37	0s21	19 37	2 44	17 12	0n 1	20 39	0 37	10 37	1 30	12 51	2 8	1 39	0 45	18 32	1 44	16 43	16 12	7 26	7 58	18 31	5 19	2 32	
S 19	10 57	0s10	1 26	19 57	2 48	17 35	0 4	20 48	0 38	10 34	1 30	12 54	2 8	1 38	0 45	18 32	1 44	16 44	16 12	7 26	7 59	18 29	5 21	2 32	
M20	11 18	6 4	2 28	20 14	2 51	17 57	0 6	20 57	0 38	10 32	1 30	12 56	2 8	1 37	0 45	18 31	1 44	16 44	16 12	7 27	8 0	18 26	5 22	2 32	
T 21	11 39	11 50	3 24	20 28	2 53	18 19	0 9	21 6	0 39	10 29	1 30	12 59	2 8	1 36	0 45	18 31	1 44	16 44	16 12	7 30	8 1	18 23	5 23	2 32	
W22	11 59	17 13	4 10	20 40	2 53	18 40	0 12	21 15	0 39	10 26	1 30	13 1	2 8	1 35	0 45	18 31	1 44	16 44	16 11	7 32	8 3	18 20	5 25	2 32	
T 23	12 19	21 55	4 44	20 49	2 53	19 1	0 14	21 24	0 40	10 24	1 30	13 3	2 8	1 34	0 45	18 30	1 44	16 45	16 11	7 36	8 4	18 18	5 26	2 32	
F 24	12 39	25 32	5 3	20 54	2 51	19 22	0 17	21 32	0 40	10 21	1 30	13 6	2 8	1 33	0 45	18 30	1 44	16 45	16 11	7 39	8 5	18 15	5 27	2 32	
S 25	12 59	27 44	5 4	20 57	2 48	19 42	0 20	21 40	0 41	10 19	1 30	13 8	2 8	1 33	0 45	18 30	1 44	16 45	16 11	7 42	8 6	18 12	5 29	2 32	
S 26	13 18	28 15	4 49	20 58	2 44	20 1	0 22	21 48	0 41	10 16	1 30	13 11	2 8	1 32	0 45	18 30	1 44	16 45	16 10	7 45	8 7	18 9	5 30	2 32	
M27	13 38	26 58	4 15	20 55	2 38	20 20	0 25	21 56	0 42	10 13	1 29	13 13	2 8	1 31	0 45	18 29	1 44	16 45	16 10	7 46	8 9	18 7	5 31	2 32	
T 28	13 57	23 58	3 26	20 50	2 32	20 39	0 28	22 4	0 42	10 11	1 29	13 15	2 8	1 30	0 45	18 29	1 44	16 46	16 10	7 47	8 10	18 4	5 32	2 32	
W29	14 16	19 32	2 25	20 42	2 32	20 56	0 30	22 11	0 43	10 8	1 29	13 18	2 8	1 29	0 45	18 29	1 44	16 46	16 9	7 47	8 11	18 1	5 34	2 32	
T30	14n35	13s59	1s14	20n32	2n14	21n14	0n33	22n18	0n43	10s 6	1n29	13n20	2s 8	1s29	0n45	18s28	1n44	16n46	16n 9	7s47	8s12	17n58	5n35	2n32	

ASTRODIENST EPHEMERIS for the year 1970
geocentric

MAY 1970

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
F 1	14 34 2	10♌12'32	10♋15	22°R12	3♊50	8♊21	29°R55	11♌52	5°R24	0°R 3	25°R 0	10°R 6	8♋56	16♌6	8♊15	F 1
S 2	14 37 59	11°10'46	24°24	21♌57	5° 3	9° 2	29♌47	12° 0	5♌22	0♌2	24♎59	10♋6	8°53	16°13	8°18	S 2
S 3	14 41 55	12° 8'59	8♊29	21°37	6°16	9°42	29°40	12° 8	5°20	0° 0	24°58	10° 3	8°50	16°19	8°21	S 3
M 4	14 45 52	13° 7'11	22°27	21°13	7°29	10°23	29°32	12°15	5°18	29♎59	24°57	9°57	8°46	16°26	8°24	M 4
T 5	14 49 48	14° 5'21	6♌15	20°45	8°42	11° 4	29°25	12°23	5°16	29°57	24°56	9°49	8°43	16°33	8°27	T 5
W 6	14 53 45	15° 3'29	19°50	20°15	9°55	11°44	29°18	12°31	5°15	29°55	24°55	9°39	8°40	16°39	8°30	W 6
T 7	14 57 41	16° 1'36	3♊8	19°42	11° 8	12°25	29°11	12°39	5°13	29°54	24°54	9°27	8°37	16°46	8°33	T 7
F 8	15 1 38	16°59'40	16° 8	19° 7	12°21	13° 6	29° 4	12°46	5°11	29°52	24°53	9°16	8°34	16°53	8°36	F 8
S 9	15 5 35	17°57'44	28°49	18°31	13°34	13°46	28°57	12°54	5° 9	29°51	24°52	9° 6	8°31	16°59	8°39	S 9
S 10	15 9 31	18°55'45	11♌12	17°54	14°47	14°27	28°50	13° 2	5° 8	29°49	24°51	8°59	8°27	17° 6	8°42	S 10
M 11	15 13 28	19°53'45	23°20	17°17	15°59	15° 7	28°43	13° 9	5° 6	29°48	24°51	8°53	8°24	17°13	8°44	M 11
T 12	15 17 24	20°51'42	5♌17	16°42	17°12	15°48	28°37	13°17	5° 4	29°46	24°50	8°50	8°21	17°19	8°47	T 12
W 13	15 21 21	21°49'38	17° 7	16° 7	18°25	16°28	28°30	13°25	5° 3	29°44	24°49	8°D49	8°18	17°26	8°50	W 13
T 14	15 25 17	22°47'32	28°56	15°34	19°37	17° 8	28°24	13°32	5° 1	29°43	24°48	8°49	8°15	17°33	8°53	T 14
F 15	15 29 14	23°45'25	10♎49	15° 4	20°50	17°49	28°17	13°40	5° 0	29°41	24°48	8°R49	8°11	17°39	8°56	F 15
S 16	15 33 10	24°43'15	22°51	14°37	22° 3	18°29	28°11	13°48	4°59	29°40	24°47	8°48	8° 8	17°46	8°58	S 16
S 17	15 37 7	25°41'04	5♌8	14°13	23°15	19° 9	28° 5	13°55	4°57	29°38	24°46	8°46	8° 5	17°53	9° 1	S 17
M 18	15 41 4	26°38'51	17°43	13°52	24°28	19°49	27°59	14° 3	4°56	29°36	24°46	8°41	8° 2	17°59	9° 3	M 18
T 19	15 45 0	27°36'37	0♎39	13°36	25°40	20°30	27°53	14°10	4°55	29°35	24°45	8°33	7°59	18° 6	9° 6	T 19
W 20	15 48 57	28°34'21	13°57	13°24	26°52	21°10	27°47	14°18	4°54	29°33	24°45	8°23	7°56	18°13	9° 9	W 20
T 21	15 52 53	29°32'04	27°35	13°16	28° 5	21°50	27°41	14°25	4°52	29°31	24°44	8°12	7°52	18°19	9°11	T 21
F 22	15 56 50	0♊29'45	11♌32	13°D12	29°17	22°30	27°36	14°33	4°51	29°30	24°44	8° 0	7°49	18°26	9°14	F 22
S 23	16 0 46	1°27'25	25°43	13°13	0♌29	23°10	27°31	14°41	4°50	29°28	24°43	7°49	7°46	18°32	9°16	S 23
S 24	16 4 43	2°25'05	10♌1	13°19	1°41	23°50	27°25	14°48	4°49	29°27	24°43	7°40	7°43	18°39	9°18	S 24
M 25	16 8 39	3°22'43	24°22	13°29	2°53	24°30	27°20	14°55	4°48	29°25	24°43	7°33	7°40	18°46	9°21	M 25
T 26	16 12 36	4°20'19	8♌42	13°43	4° 5	25°10	27°15	15° 3	4°47	29°23	24°42	7°30	7°37	18°52	9°23	T 26
W 27	16 16 33	5°17'55	22°56	14° 2	5°18	25°50	27°11	15°10	4°46	29°22	24°42	7°28	7°33	18°59	9°25	W 27
T 28	16 20 29	6°15'31	7♋4	14°26	6°30	26°30	27° 6	15°18	4°46	29°20	24°42	7°28	7°30	19° 6	9°28	T 28
F 29	16 24 26	7°13'05	21° 4	14°53	7°41	27°10	27° 1	15°25	4°45	29°19	24°41	7°28	7°27	19°12	9°30	F 29
S 30	16 28 22	8°10'38	4♊56	15°25	8°53	27°49	26°57	15°32	4°44	29°17	24°41	7°26	7°24	19°19	9°32	S 30
S 31	16 32 19	9♊8'11	18♊39	16♌1	10♌5	28♊29	26♌53	15♌40	4♌43	29♎15	24♎41	7♋23	7♋21	19♌26	9♊34	S 31

Day	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
F 1	14n53	7s43	0n 1	20n19	2n 4	21n30	0n36	22n25	0n44	10s 3	1n29	13n23	2s 8	1s28	F 1
S 2	15 11	1 4	1 16	20 3	1 52	21 46	0 38	22 32	0 44	10 1	1 29	13 25	2 7	1 27	S 2
S 3	15 29	5n35	2 25	19 46	1 39	22 2	0 41	22 39	0 45	9 58	1 29	13 27	2 7	1 26	S 3
M 4	15 47	11 55	3 26	19 26	1 25	22 17	0 43	22 45	0 45	9 56	1 29	13 30	2 7	1 26	M 4
T 5	16 4	17 35	4 13	19 5	1 10	22 31	0 46	22 51	0 45	9 53	1 29	13 32	2 7	1 25	T 5
W 6	16 21	22 16	4 45	18 41	0 55	22 45	0 49	22 57	0 46	9 51	1 29	13 34	2 7	1 24	W 6
T 7	16 38	25 42	5 1	18 17	0 38	22 58	0 51	23 3	0 46	9 48	1 28	13 37	2 7	1 23	T 7
F 8	16 55	27 42	5 1	17 51	0 21	23 10	0 54	23 9	0 47	9 46	1 28	13 39	2 7	1 23	F 8
S 9	17 11	28 12	4 45	17 24	0 4	23 22	0 56	23 14	0 47	9 44	1 28	13 41	2 7	1 22	S 9
S 10	17 27	27 14	4 17	16 57	0s13	23 33	0 59	23 19	0 47	9 41	1 28	13 44	2 7	1 22	S 10
M 11	17 43	25 0	3 37	16 30	0 31	23 43	1 1	23 24	0 48	9 39	1 28	13 46	2 7	1 21	M 11
T 12	17 59	21 40	2 48	16 4	0 48	23 53	1 3	23 29	0 48	9 37	1 28	13 48	2 7	1 20	T 12
W 13	18 14	17 30	1 53	15 37	1 5	24 2	1 6	23 34	0 49	9 35	1 28	13 51	2 7	1 20	W 13
T 14	18 28	12 40	0 52	15 12	1 25	24 10	1 8	23 38	0 49	9 33	1 27	13 53	2 7	1 19	T 14
F 15	18 43	7 21	0s11	14 48	1 38	24 18	1 10	23 42	0 49	9 31	1 27	13 55	2 7	1 19	F 15
S 16	18 57	1 42	1 14	14 25	1 53	24 25	1 13	23 46	0 50	9 29	1 27	13 57	2 7	1 18	S 16
S 17	19 11	4s 6	2 15	14 4	2 8	24 31	1 15	23 50	0 50	9 27	1 27	14 0	2 7	1 18	S 17
M 18	19 25	9 53	3 11	13 45	2 22	24 37	1 17	23 54	0 51	9 25	1 27	14 2	2 7	1 17	M 18
T 19	19 38	15 25	3 58	13 28	2 34	24 42	1 19	23 57	0 51	9 23	1 26	14 4	2 7	1 17	T 19
W 20	19 51	20 23	4 34	13 13	2 46	24 46	1 21	24 0	0 51	9 21	1 26	14 6	2 7	1 16	W 20
T 21	20 3	24 25	4 56	13 1	2 57	24 49	1 23	24 3	0 52	9 19	1 26	14 8	2 7	1 16	T 21
F 22	20 16	27 7	5 0	12 51	3 6	24 52	1 25	24 6	0 52	9 17	1 26	14 11	2 7	1 15	F 22
S 23	20 27	28 9	4 46	12 43	3 15	24 54	1 27	24 8	0 52	9 15	1 26	14 13	2 7	1 15	S 23
S 24	20 39	27 18	4 15	12 37	3 22	24 55	1 29	24 11	0 53	9 14	1 25	14 15	2 7	1 15	S 24
M 25	20 50	24 38	3 27	12 34	3 29	24 56	1 31	24 13	0 53	9 12	1 25	14 17	2 8	1 14	M 25
T 26	21 1	20 26	2 26	12 33	3 34	24 56	1 33	24 15	0 53	9 11	1 25	14 19	2 8	1 14	T 26
W 27	21 11	15 4	1 16	12 35	3 38	24 55	1 35	24 16	0 54	9 9	1 25	14 21	2 8	1 14	W 27
T 28	21 22	8 57	0 2	12 39	3 41	24 53	1 36	24 18	0 54	9 8	1 25	14 23	2 8	1 13	T 28
F 29	21 31	2 27	1n11	12 44	3 44	24 51	1 38	24 19	0 54	9 6	1 24	14 26	2 8	1 13	F 29
S 30	21 41	4n 6	2 20	12 52	3 45	24 48	1 40	24 20	0 55	9 5	1 24	14 28	2 8	1 13	S 30
S 31	21n50	10n23	3n19	13n 2	3s45	24n44	1n41	24n21	0n55	9s 4	1n24	14n30	2s 8	1s13	S 31

Julian Day Number = 2440707.5, Delta T = 40.50 sec
Ecliptic obliquity = 23°26'44, Nutation = 0°00'05, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 24°19'33, Lahiri = 23°26'34

ASTRODIENST EPHEMERIS for the year 1970

geocentric

JUNE 1970

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	16 36 15	10 ^{II} 5'42	2 ^{III} 13	16 ^{III} 41	11 ^{III} 17	29 ^{II} 9	26 ^R 49	15 ^{III} 47	4 ^R 43	29 ^R 14	24 ^R 41	7 ^R 16	7 ^{III} 17	19 ^{II} 32	9 ^{III} 36	M 1
T 2	16 40 12	11° 3'13	15°37	17°25	12°29	29°49	26 ^{II} 45	15°54	4 ^{II} 42	29 ^{III} 12	24 ^{III} 41	7 ^{III} 7	7°14	19°39	9°38	T 2
W 3	16 44 8	12° 0'43	28°49	18°12	13°40	0 ^{III} 28	26°41	16° 1	4°42	29°11	24°41	6°55	7°11	19°46	9°40	W 3
T 4	16 48 5	12°58'12	11 ^{II} 48	19° 3	14°52	1° 8	26°38	16° 9	4°41	29° 9	24°41	6°42	7° 8	19°52	9°42	T 4
F 5	16 52 2	13°55'41	24°33	19°58	16° 4	1°48	26°35	16°16	4°41	29° 7	24°D41	6°29	7° 5	19°59	9°44	F 5
S 6	16 55 58	14°53'08	7 ^{III} 2	20°56	17°15	2°27	26°31	16°23	4°40	29° 6	24°41	6°18	7° 2	20° 6	9°46	S 6
S 7	16 59 55	15°50'34	19°18	21°58	18°27	3° 7	26°28	16°30	4°40	29° 4	24°41	6° 8	6°58	20°12	9°48	S 7
M 8	17 3 51	16°47'59	1 ^{II} 22	23° 3	19°38	3°47	26°25	16°37	4°40	29° 3	24°41	6° 1	6°55	20°19	9°50	M 8
T 9	17 7 48	17°45'23	13°16	24°11	20°50	4°26	26°23	16°44	4°40	29° 1	24°41	5°57	6°52	20°26	9°51	T 9
W10	17 11 44	18°42'46	25° 4	25°22	22° 1	5° 6	26°20	16°51	4°39	29° 0	24°41	5°55	6°49	20°32	9°53	W10
T 11	17 15 41	19°40'08	6 ^{III} 52	26°37	23°12	5°45	26°18	16°58	4°39	28°58	24°41	5°D55	6°46	20°39	9°55	T 11
F 12	17 19 37	20°37'29	18°45	27°55	24°23	6°25	26°16	17° 5	4°D39	28°57	24°41	5°R55	6°43	20°46	9°56	F 12
S 13	17 23 34	21°34'49	0 ^{II} 47	29°16	25°34	7° 4	26°14	17°12	4°39	28°55	24°42	5°55	6°39	20°52	9°58	S 13
S 14	17 27 31	22°32'08	13° 4	0 ^{II} 40	26°45	7°43	26°12	17°19	4°39	28°54	24°42	5°53	6°36	20°59	10° 0	S 14
M15	17 31 27	23°29'26	25°42	2° 7	27°56	8°23	26°11	17°25	4°40	28°52	24°42	5°49	6°33	21° 5	10° 1	M15
T 16	17 35 24	24°26'43	8 ^{III} 43	3°37	29° 7	9° 2	26° 9	17°32	4°40	28°51	24°43	5°43	6°30	21°12	10° 2	T 16
W17	17 39 20	25°24'00	22°10	5° 9	0 ^{II} 18	9°41	26° 8	17°39	4°40	28°50	24°43	5°34	6°27	21°19	10° 4	W17
T 18	17 43 17	26°21'16	6 ^{III} 2	6°45	1°29	10°21	26° 7	17°45	4°40	28°48	24°43	5°24	6°23	21°25	10° 5	T 18
F 19	17 47 13	27°18'31	20°17	8°24	2°40	11° 0	26° 6	17°52	4°41	28°47	24°44	5°14	6°20	21°32	10° 6	F 19
S 20	17 51 10	28°15'46	4 ^{III} 50	10° 6	3°50	11°39	26° 5	17°58	4°41	28°45	24°44	5° 4	6°17	21°39	10° 8	S 20
S 21	17 55 7	29°13'00	19°32	11°50	5° 1	12°18	26° 5	18° 5	4°41	28°44	24°45	4°56	6°14	21°45	10° 9	S 21
M22	17 59 3	0 ^{III} 10'14	4 ^{III} 18	13°38	6°11	12°58	26° 4	18°11	4°42	28°43	24°45	4°51	6°11	21°52	10°10	M22
T 23	18 3 0	1° 7'27	18°59	15°28	7°22	13°37	26°D 4	18°18	4°42	28°41	24°46	4°48	6° 8	21°59	10°11	T 23
W24	18 6 56	2° 4'41	3 ^{III} 30	17°21	8°32	14°16	26° 4	18°24	4°43	28°40	24°46	4°D47	6° 4	22° 5	10°12	W24
T 25	18 10 53	3° 1'54	17°47	19°16	9°43	14°55	26° 4	18°30	4°44	28°39	24°47	4°47	6° 1	22°12	10°13	T 25
F 26	18 14 49	3°59'07	1 ^{III} 49	21°14	10°53	15°34	26° 5	18°36	4°44	28°38	24°48	4°R48	5°58	22°19	10°14	F 26
S 27	18 18 46	4°56'20	15°36	23°14	12° 3	16°13	26° 5	18°43	4°45	28°36	24°48	4°47	5°55	22°25	10°15	S 27
S 28	18 22 42	5°53'34	29° 7	25°16	13°13	16°52	26° 6	18°49	4°46	28°35	24°49	4°45	5°52	22°32	10°16	S 28
M29	18 26 39	6°50'47	12 ^{III} 25	27°20	14°23	17°31	26° 7	18°55	4°47	28°34	24°50	4°40	5°49	22°39	10°17	M29
T 30	18 30 36	7°54'01	25 ^{III} 29	29 ^{II} 26	15 ^{II} 33	18°510	26 ^{II} 8	19 ^{III} 1	4°48	28 ^{III} 33	24 ^{III} 51	4 ^{III} 34	5 ^{III} 45	22 ^{II} 45	10 ^{III} 17	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
M 1	21n58	16n 6	4n 7	13n14	3s45	24n40	1n43	24n22	0n55	9s 2	1n24	14n32	2s 8	1s12	0n44	18s17	1n45	16n42	15n57	8s51	8s50	16n27	6n 9	2n33	
T 2	22 6	20 59	4 40	13 27	3 44	24 35	1 44	24 22	0 56	9 1	1 23	14 34	2 8	1 12	0 43	18 17	1 44	16 42	15 56	8 54	8 51	16 24	6 10	2 33	
W 3	22 14	24 44	4 57	13 42	3 42	24 29	1 45	24 23	0 56	9 0	1 23	14 36	2 8	1 12	0 43	18 17	1 44	16 42	15 56	8 58	8 52	16 22	6 11	2 33	
T 4	22 22	27 9	4 59	13 59	3 39	24 23	1 46	24 23	0 56	8 59	1 23	14 38	2 8	1 12	0 43	18 16	1 44	16 41	15 55	9 3	8 54	16 19	6 12	2 33	
F 5	22 29	28 5	4 46	14 17	3 35	24 16	1 48	24 22	0 56	8 58	1 23	14 40	2 8	1 12	0 43	18 16	1 44	16 41	15 55	9 8	8 55	16 16	6 12	2 33	
S 6	22 35	27 34	4 19	14 36	3 31	24 8	1 49	24 22	0 57	8 57	1 22	14 42	2 8	1 12	0 43	18 16	1 44	16 40	15 54	9 12	8 56	16 13	6 13	2 33	
S 7	22 42	25 41	3 40	14 57	3 26	23 59	1 50	24 22	0 57	8 56	1 22	14 44	2 8	1 12	0 43	18 15	1 44	16 40	15 54	9 16	8 57	16 10	6 14	2 33	
M 8	22 47	22 40	2 52	15 19	3 20	23 50	1 51	24 21	0 57	8 56	1 22	14 46	2 8	1 12	0 43	18 15	1 44	16 39	15 53	9 18	8 58	16 7	6 15	2 34	
T 9	22 53	18 43	1 57	15 42	3 13	23 40	1 51	24 20	0 58	8 55	1 22	14 47	2 8	1 12	0 43	18 15	1 44	16 39	15 53	9 20	9 0	16 4	6 16	2 34	
W10	22 58	14 4	0 57	16 6	3 6	23 30	1 52	24 19	0 58	8 54	1 21	14 49	2 8	1 12	0 43	18 15	1 44	16 39	15 52	9 21	9 1	16 1	6 16	2 34	
T 11	23 3	8 55	0s 5	16 30	2 59	23 18	1 53	24 17	0 58	8 54	1 21	14 51	2 8	1 12	0 43	18 14	1 44	16 38	15 52	9 21	9 2	15 58	6 17	2 34	
F 12	23 7	3 25	1 8	16 55	2 51	23 7	1 54	24 16	0 58	8 53	1 21	14 53	2 9	1 12	0 43	18 14	1 44	16 38	15 52	9 21	9 3	15 55	6 18	2 34	
S 13	23 11	2s16	2 8	17 21	2 42	22 54	1 54	24 14	0 59	8 53	1 21	14 55	2 9	1 12	0 43	18 14	1 44	16 37	15 51	9 21	9 4	15 52	6 18	2 34	
S 14	23 14	7 59	3 4	17 48	2 33	22 41	1 55	24 12	0 59	8 52	1 20	14 57	2 9	1 12	0 43	18 13	1 44	16 37	15 51	9 21	9 5	15 49	6 19	2 34	
M15	23 17	13 32	3 52	18 14	2 24	22 27	1 55	24 10	0 59	8 52	1 20	14 58	2 9	1 12	0 43	18 13	1 44	16 36	15 50	9 23	9 7	15 46	6 20	2 34	
T 16	23 20	18 40	4 30	18 41	2 14	22 13	1 55	24 8	0 59	8 52	1 20	15 0	2 9	1 12	0 43	18 13	1 44	16 35	15 50	9 25	9 8	15 43	6 20	2 34	
W17	23 22	23 3	4 55	19 8	2 4	21 58	1 56	24 5	1 0	8 51	1 20	15 2	2 9	1 12	0 43	18 12	1 44	16 35	15 49	9 28	9 9	15 41	6 21	2 34	
T 18	23 24	26 17	5 3	19 35	1 53	21 43	1 56	24 2	1 0	8 51	1 19	15 4	2 9	1 12	0 43	18 12	1 44	16 34	15 49	9 32	9 10	15 38	6 21	2 34	
F 19	23 25	27 57	4 52	20 2	1 42	21 27	1 56	23 59	1 0	8 51	1 19	15 5	2 9	1 12	0 43	18 12	1 44	16 34	15 48	9 36	9 11	15 35	6 22	2 34	
S 20	23 26	27 45	4 23	20 28	1 31	21 10	1 56	23 56	1 0	8 51	1 19	15 7	2 9	1 12	0 43	18 12	1 44	16 33	15 48	9 39	9 12	15 32	6 23	2 34	
S 21	23 27	25 35	3 36	20 54	1 20	20 53	1 56	23 53	1 1	8 51	1 18	15 9	2 9	1 13	0 43	18 11	1 44	16 33	15 47	9 42	9 14	15 29	6 23	2 34	
M22	23 27	21 42	2 35	21 19	1 8	20 35	1 55	23 49	1 1	8 51	1 18	15 11	2 10	1 13	0 43	18 11	1 44	16 32	15 47	9 44	9 15	15 26	6 24	2 34	
T 23	23 26	16 27	1 23	21 43	0 57	20 17	1 55	23 46	1 1	8 52	1 18	15 12	2 10	1 13	0 43	18 11	1 44	16 31	15 47	9 45	9 16	15 23	6 24	2 35	
W24	23 26	10 20	0 7	22 6	0 45	19 59	1 55	23 42	1 1	8 52	1 18	15 14	2 10	1 13	0 43	18 11	1 44	16 31	15 46	9 46	9 17	15 20	6 25	2 35	
T 25	23 25	3 46	1n 9	22 28	0 33	19 39	1 54	23 38	1 2	8 52	1 17	15 15	2 10	1 14	0 42	18 10	1 44	16 30	15 46	9 45	9 18	15 17	6 25	2 35	
F 26	23 23	2n51	2 19	22 48	0 22	19 20	1 53	23 34	1 2	8 53	1 17	15 17	2 10	1 14	0 42	18 10	1 44	16 29	15 45	9 45	9 20	15 14	6 25	2 35	
S 27	23 21	9 13	3 20	23 6	0 10	18 59	1 53	23 29	1 2	8 53	1 17	15 19	2 10	1 14	0 42	18 10	1 44	16 29	15 45	9 45	9 21	15 11	6 26	2 35	
S 28	23 19	15 2	4 9	23 23	0n 1	18 39	1 52	23 25	1 2	8 54	1 17	15 20	2 10	1 15	0 42	18 10	1 44	16 28	15 44	9 46	9 22	15 8	6 26	2 35	
M29	23 16	20 3	4 4	23 37	0 12	18 18	1 51	23 20	1 2	8 54	1 16	15 22	2 10	1 15	0 42	18 9	1 44	16 27	15 44	9 48	9 23	15 5	6 27	2 35	
T 30	23n13	24n 1	5n 1	23n50	0n23	17n56	1n50	23n15	1n 3	8s55	1n16	15n23	2s11	1s15	0n42	18s 9	1n44	16n27	15n43	9s50	9s24	15n 2	6n27	2n35	

ASTRODIENST EPHEMERIS for the year 1970

geocentric

JULY 1970

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	18 34 32	8 ⁵⁴ 14	8 ¹¹ 20	19 ³⁴	16 ⁰⁴ 3	18 ⁵⁴ 9	26 ¹⁵ 9	19 ⁰⁸ 7	4 ⁴⁴ 49	28 ^{0R} 32	24 ¹¹ 51	4 ^{0R} 25	5 ¹⁴ 42	22 ⁰⁵ 52	10 ¹⁰ 18	W 1
T 2	18 38 29	9 ⁴² 28	20 ⁵⁹	3 ⁴²	17 ⁵²	19 ²⁸	26 ¹¹	19 ¹²	4 ⁵⁰	28 ¹¹ 30	24 ⁵²	4 ¹⁵	5 ³⁹	22 ⁵⁹	10 ¹⁹	T 2
F 3	18 42 25	10 ³⁹ 41	3 ⁵² 26	5 ⁵²	19 ²	20 ⁷	26 ¹²	19 ¹⁸	4 ⁵¹	28 ²⁹	24 ⁵³	4 ⁶	5 ³⁶	23 ⁵	10 ¹⁹	F 3
S 4	18 46 22	11 ³⁶ 55	15 ⁴²	8 ²	20 ¹²	20 ⁴⁶	26 ¹⁴	19 ²⁴	4 ⁵²	28 ²⁸	24 ⁵⁴	3 ⁵⁷	5 ³³	23 ¹²	10 ²⁰	S 4
S 5	18 50 18	12 ³⁴ 09	27 ⁴⁷	10 ¹²	21 ²¹	21 ²⁵	26 ¹⁶	19 ³⁰	4 ⁵³	28 ²⁷	24 ⁵⁵	3 ⁵⁰	5 ²⁹	23 ¹⁸	10 ²⁰	S 5
M 6	18 54 15	13 ³¹ 22	9 ⁰⁴ 44	12 ²³	22 ³¹	22 ⁴	26 ¹⁸	19 ³⁵	4 ⁵⁴	28 ²⁶	24 ⁵⁶	3 ⁴⁵	5 ²⁶	23 ²⁵	10 ²¹	M 6
T 7	18 58 11	14 ²⁸ 35	21 ³⁴	14 ³³	23 ⁴⁰	22 ⁴³	26 ²¹	19 ⁴¹	4 ⁵⁵	28 ²⁵	24 ⁵⁷	3 ⁴²	5 ²³	23 ³²	10 ²¹	T 7
W 8	19 2 8	15 ²⁵ 48	3 ¹¹ 21	16 ⁴²	24 ⁴⁹	23 ²²	26 ²³	19 ⁴⁶	4 ⁵⁷	28 ²⁴	24 ⁵⁸	3 ^{0D} 41	5 ²⁰	23 ³⁸	10 ²¹	W 8
T 9	19 6 5	16 ²³ 01	15 ⁸	18 ⁵¹	25 ⁵⁸	24 ¹	26 ²⁶	19 ⁵²	4 ⁵⁸	28 ²³	24 ⁵⁹	3 ⁴¹	5 ¹⁷	23 ⁴⁵	10 ²²	T 9
F 10	19 10 1	17 ²⁰ 14	27 ⁰	20 ⁵⁹	27 ⁷	24 ³⁹	26 ²⁹	19 ⁵⁷	4 ⁵⁹	28 ²²	25 ⁰	3 ⁴³	5 ¹⁴	23 ⁵²	10 ²²	F 10
S 11	19 13 58	18 ¹⁷ 27	9 ¹	23 ⁶	28 ¹⁶	25 ¹⁸	26 ³²	20 ²	5 ¹	28 ²¹	25 ¹	3 ⁴⁴	5 ¹⁰	23 ⁵⁸	10 ²²	S 11
S 12	19 17 54	19 ¹⁴ 40	21 ¹⁷	25 ¹²	29 ²⁵	25 ⁵⁷	26 ³⁵	20 ⁷	5 ²	28 ²⁰	25 ²	3 ^{0R} 44	5 ⁷	24 ⁵	10 ²²	S 12
M13	19 21 51	20 ¹¹ 53	3 ¹¹ 53	27 ¹⁶	0 ¹¹ 34	26 ³⁶	26 ³⁸	20 ¹³	5 ⁴	28 ²⁰	25 ³	3 ⁴³	5 ⁴	24 ¹²	10 ²²	M13
T 14	19 25 47	21 ⁹ 06	16 ⁵³	29 ¹⁹	1 ⁴²	27 ¹⁴	26 ⁴²	20 ¹⁸	5 ⁶	28 ¹⁹	25 ⁵	3 ⁴¹	5 ¹	24 ¹⁸	10 ²²	T 14
W15	19 29 44	22 ⁶ 19	0 ¹⁷ 20	1 ⁰² 20	2 ⁵¹	27 ⁵³	26 ⁴⁵	20 ²³	5 ⁷	28 ¹⁸	25 ⁶	3 ³⁶	4 ⁵⁸	24 ²⁵	10 ²²	W15
T 16	19 33 40	23 ³ 32	14 ¹⁴	3 ²⁰	3 ⁵⁹	28 ³²	26 ⁴⁹	20 ²⁷	5 ⁹	28 ¹⁷	25 ⁷	3 ³¹	4 ⁵⁵	24 ³²	10 ²²	T 16
F 17	19 37 37	24 ⁰ 45	28 ³⁶	5 ¹⁷	5 ⁷	29 ¹¹	26 ⁵³	20 ³²	5 ¹¹	28 ¹⁶	25 ⁸	3 ²⁵	4 ⁵¹	24 ³⁸	10 ²²	F 17
S 18	19 41 34	24 ⁵⁷ 58	13 ³ 19	7 ¹³	6 ¹⁵	29 ⁴⁹	26 ⁵⁸	20 ³⁷	5 ¹²	28 ¹⁶	25 ¹⁰	3 ¹⁹	4 ⁴⁸	24 ⁴⁵	10 ²²	S 18
S 19	19 45 30	25 ⁵⁵ 12	28 ¹⁷	9 ⁸	7 ²³	0 ⁰² 28	27 ²	20 ⁴²	5 ¹⁴	28 ¹⁵	25 ¹¹	3 ¹⁵	4 ⁴⁵	24 ⁵²	10 ²¹	S 19
M20	19 49 27	26 ⁵² 27	13 ³² 21	11 ⁰	8 ³¹	1 ⁶	27 ⁶	20 ⁴⁶	5 ¹⁶	28 ¹⁴	25 ¹²	3 ¹²	4 ⁴²	24 ⁵⁸	10 ²¹	M20
T 21	19 53 23	27 ⁴⁹ 41	28 ²³	12 ⁵¹	9 ³⁹	1 ⁴⁵	27 ¹¹	20 ⁵¹	5 ¹⁸	28 ¹⁴	25 ¹⁴	3 ^{0D} 10	4 ³⁹	25 ⁵	10 ²¹	T 21
W22	19 57 20	28 ⁴⁶ 57	13 ¹¹ 13	14 ⁴⁰	10 ⁴⁶	2 ²⁴	27 ¹⁶	20 ⁵⁵	5 ²⁰	28 ¹³	25 ¹⁵	3 ¹¹	4 ³⁵	25 ¹¹	10 ²⁰	W22
T 23	20 1 16	29 ⁴⁴ 13	27 ⁴⁷	16 ²⁷	11 ⁵⁴	3 ²	27 ²¹	21 ⁰	5 ²²	28 ¹²	25 ¹⁶	3 ¹²	4 ³²	25 ¹⁸	10 ²⁰	T 23
F 24	20 5 13	0 ⁰⁴ 130	12 ¹⁷ 0	18 ¹²	13 ¹	3 ⁴¹	27 ²⁶	21 ⁴	5 ²⁴	28 ¹²	25 ¹⁸	3 ¹³	4 ²⁹	25 ²⁵	10 ¹⁹	F 24
S 25	20 9 9	1 ³⁸ 48	25 ⁵¹	19 ⁵⁵	14 ⁸	4 ¹⁹	27 ³¹	21 ⁸	5 ²⁶	28 ¹¹	25 ¹⁹	3 ^{0R} 14	4 ²⁶	25 ³¹	10 ¹⁹	S 25
S 26	20 13 6	2 ³⁶ 07	9 ⁸ 21	21 ³⁷	15 ¹⁵	4 ⁵⁸	27 ³⁶	21 ¹²	5 ²⁹	28 ¹¹	25 ²¹	3 ¹⁴	4 ²³	25 ³⁸	10 ¹⁸	S 26
M27	20 17 3	3 ³³ 27	22 ³¹	23 ¹⁷	16 ²²	5 ³⁶	27 ⁴²	21 ¹⁶	5 ³¹	28 ¹⁰	25 ²²	3 ¹³	4 ²⁰	25 ⁴⁵	10 ¹⁸	M27
T 28	20 20 59	4 ³⁰ 48	5 ¹¹ 24	24 ⁵⁵	17 ²⁹	6 ¹⁵	27 ⁴⁸	21 ²⁰	5 ³³	28 ¹⁰	25 ²⁴	3 ¹⁰	4 ¹⁶	25 ⁵¹	10 ¹⁷	T 28
W29	20 24 56	5 ²⁸ 09	18 ⁰	26 ³²	18 ³⁶	6 ⁵³	27 ⁵⁴	21 ²⁴	5 ³⁵	28 ¹⁰	25 ²⁵	3 ⁶	4 ¹³	25 ⁵⁸	10 ¹⁶	W29
T 30	20 28 52	6 ²⁵ 32	0 ⁰² 24	28 ⁷	19 ⁴²	7 ³²	28 ⁰	21 ²⁸	5 ³⁸	28 ⁹	25 ²⁷	3 ²	4 ¹⁰	26 ⁵	10 ¹⁵	T 30
F 31	20 32 49	7 ⁰² 22'56	12 ³⁶ 36	29 ⁰⁴ 40	20 ¹¹ 49	8 ⁰² 10	28 ¹⁵ 6	21 ¹⁸ 31	5 ⁴⁰ 40	28 ¹¹ 9	25 ¹¹ 29	2 ¹¹ 58	4 ¹¹ 7	26 ⁰² 11	10 ¹⁴ 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
W 1	23n 9	26n43	5n 5	23n59	0n33	17n34	1n49	23n10	1n 3	8s56	1n16	15n25	2s11	1s16	0n42	18s 9	1n44	16n26	15n43	9s54	9s25	14n59	6n27	2n35	2s35	2s35	
T 2	23 5	28 0	4 53	24 7	0 43	17 11	1 48	23 4	1 3	8 56	1 15	15 26	2 11	1 16	0 42	18 9	1 44	16 25	15 43	9 57	9 27	14 56	6 28	2 35	2 35		
F 3	23 1	27 51	4 27	24 11	0 52	16 49	1 47	22 59	1 3	8 57	1 15	15 27	2 11	1 17	0 42	18 9	1 44	16 24	15 42	10 1	9 28	14 53	6 28	2 35	2 35		
S 4	22 56	26 19	3 49	24 13	1 1	16 25	1 45	22 53	1 3	8 58	1 15	15 29	2 11	1 17	0 42	18 8	1 44	16 24	15 42	10 4	9 29	14 50	6 28	2 35	2 35		
S 5	22 51	23 34	3 1	24 12	1 9	16 2	1 44	22 47	1 4	8 59	1 15	15 30	2 11	1 18	0 42	18 8	1 43	16 23	15 41	10 6	9 30	14 47	6 29	2 35	2 35		
M 6	22 45	19 50	2 6	24 8	1 16	15 38	1 42	22 41	1 4	9 0	1 14	15 32	2 11	1 18	0 42	18 8	1 43	16 22	15 41	10 8	9 31	14 44	6 29	2 35	2 35		
T 7	22 40	15 21	1 5	24 2	1 23	15 13	1 41	22 35	1 4	9 1	1 14	15 33	2 12	1 19	0 42	18 8	1 43	16 21	15 40	10 9	9 32	14 41	6 29	2 36	2 36		
W 8	22 33	10 19	0 2	23 52	1 29	14 48	1 39	22 29	1 4	9 2	1 14	15 34	2 12	1 19	0 42	18 8	1 43	16 21	15 40	10 10	9 34	14 38	6 29	2 36	2 36		
T 9	22 26	4 55	1s 2	23 40	1 34	14 23	1 37	22 22	1 4	9 4	1 14	15 36	2 12	1 20	0 42	18 8	1 43	16 20	15 40	10 9	9 35	14 35	6 29	2 36	2 36		
F 10	22 19	0s41	2 3	23 26	1 39	13 58	1 35	22 15	1 5	9 5	1 13	15 37	2 12	1 21	0 42	18 7	1 43	16 19	15 39	10 9	9 36	14 32	6 29	2 36	2 36		
S 11	22 12	6 20	3 0	23 9	1 42	13 32	1 33	22 9	1 5	9 6	1 13	15 38	2 12	1 21	0 42	18 7	1 43	16 18	15 39	10 9	9 37	14 29	6 30	2 36	2 36		
S 12	22 4	11 51	3 49	22 49	1 45	13 6	1 31	22 2	1 5	9 8	1 13	15 39	2 12	1 22	0 42	18 7	1 43	16 17	15 38	10 8	9 38	14 26	6 30	2 36	2 36		
M13	21 56	17 2	4 29	22 28	1 47	12 40	1 29	21 54	1 5	9 9	1 12	15 40	2 12	1 22	0 42	18 7	1 43	16 16	15 38	10 9	9 39	14 23	6 30	2 36	2 36		
T 14	21 47	21 37	4 57	22 4	1 49	12 13	1 26	21 47	1 5	9 10	1 12	15 42	2 13	1 23	0 42	18 7	1 43	16 16	15 38	10 10	9 40	14 20	6 30	2 36	2 36		
W15	21 38	25 16	5 10	21 39	1 50	11 46	1 24	21 39	1 5	9 12	1 12	15 43	2 13	1 24	0 42	18 7	1 43	16 15	15 37	10 11	9 42	14 17	6 30	2 36	2 36		
T 16	21 28	27 34	5 5	21 12	1 50	11 19	1 21	21 32	1 6	9 14	1 12	15 44	2 13	1 25	0 42	18 7	1 43	16 14	15 37	10 13	9 43	14 14	6 30	2 36	2 36		
F 17	21 19	28 7	4 41	20 43	1 49	10 51	1 19	21 24	1 6	9 15	1 11	15 45	2 13	1 25	0 42	18 6	1 43	16 13	15 36	10 15	9 44	14 11	6 30	2 36	2 36		
S 18	21 9	26 44	3 58	20 12	1 48	10 24	1 16	21 16	1 6	9 17	1 11	15 46	2 13	1 26	0 42	18 6	1 43	16 12	15 36	10 17	9 45	14 7	6 30	2 36	2 36		
S 19	20 58	23 26	2 59	19 41	1 46	9 56	1 13	21 8	1 6	9 19	1 11	15 47	2 13	1 27	0 41	18 6	1 43	16 11	15 36	10 19	9 46	14 4	6 30	2 36	2 36		
M20	20 47	18 31	1 46	19 8	1 43	9 28	1 10	21 0	1 6	9 21	1 11	15 48	2 14	1 28	0 41	18 6	1 43	16 10	15 35	10 20	9 47	14 1	6 30	2 37	2 37		
T 21	20 36	12 27	0 26	18 34	1 40	8 59	1 7	20 51	1 6	9 23	1 10	15 49	2 14	1 28	0 41	18 6	1 43	16 10	15 35	10 21	9 49	13 58	6 30	2 37	2 37		
W22	20 25	5 45	0n55	17 59	1 37	8 31	1 4	20 43	1 6	9 25	1 10	15 50	2 14	1 29	0 41	18 6	1 43	16 9	15 34	10 21	9 50	13 55	6 30	2 37	2 37		
T 23	20 13	1n 7	2 11	17 23	1 33	8 2	1 1	20 34	1 7	9 27	1 10	15 51	2 14	1 30	0 41	18 6	1 43	16 8	15 34	10 20	9 51	13 52	6 30	2 37	2 37		
F 24	20 0	7 46	3 17	16 46	1 28	7 33	0 57	20 25	1 7	9 29	1 10	15 52	2 14	1 31	0 41	18 6	1 43	16 7	15 34	10 20	9 52	13 49	6 29	2 37	2 37		
S 25	19 48	13 52	4 9	16 9	1 23	7 4	0 54	20 16	1 7	9 31	1 9	15 53	2 15	1 32	0 41	18 6	1 42	16 6	15 33	10 19	9 53	13 46	6 29	2 37	2 37		
S 26	19 35	19 8	4 47	15 31	1 17	6 35	0 50	20 7	1 7	9 33	1 9	15 54	2 15	1 33	0 41	18 6	1 42	16 5	15 33	10 19	9 54	13 43	6 29	2 37	2 37		
M27	19 22	23 22	5 8	14 53	1 11	6 6	0 47	19 57	1 7	9 35	1 9	15 55	2 15	1 34	0 41	18 6	1 42	16 4	15 33	10 20	9 56	13 40	6 29	2 37	2 37		
T 28	19 8	26 20	5 13	14 14	1 5	5 36	0 43	19 48	1 7	9 37	1 9	15 55	2 15	1 35	0 41	18 6	1 42	16 3	15 32	10 21	9 57	13 37	6 29	2 37	2 37		
W29	18 54	27 56	5 3	13 35	0 58	5 7	0 39	19 38	1 7	9 40	1 8	15 56	2 15	1 35	0 41	18 6	1 42	16 2	15 32	10 22	9 58	13 34	6 28	2 37	2 37		
T 30	18 40	28 5	4 39	12 56	0 51	4 37	0 35	19 29	1 7	9 42	1 8	15 57	2 15	1 36	0 41	18 6	1 42	16 1	15 32	10 24	9 59	13 31	6 28	2 37	2 37		
F 31	18n26	26n52	4n 2	12n17	0n44	4n 7	0n31	19n19	1n 8	9s44	1n 8	15n58	2s16	1s37	0n41	18s 6	1n42	16n 0	15n31	10s25	10s 0	13n28	6n28	2n37	2n37		

ASTRODIENST EPHEMERIS for the year 1970
geocentric

AUGUST 1970

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	20 36 45	8♌20'21	24♋39	1♏11	21♏55	8♌49	28♏12	21♏35	5♏42	28°R 9	25♏30	2°R54	4♏4	26♌18	10°R14	S 1
S 2	20 40 42	9°17'47	6♌35	2°40	23° 1	9°27	28°18	21°38	5°45	28♌ 8	25°32	2♏51	4° 1	26°25	10°Y13	S 2
M 3	20 44 39	10°15'13	18°25	4° 8	24° 7	10° 6	28°25	21°42	5°47	28° 8	25°34	2°49	3°57	26°31	10°12	M 3
T 4	20 48 35	11°12'40	0♏13	5°33	25°12	10°44	28°32	21°45	5°50	28° 8	25°35	2°D48	3°54	26°38	10°11	T 4
W 5	20 52 32	12°10'09	11°59	6°57	26°18	11°23	28°38	21°48	5°52	28° 8	25°37	2°49	3°51	26°45	10° 9	W 5
T 6	20 56 28	13° 7'38	23°48	8°19	27°23	12° 1	28°45	21°51	5°55	28° 8	25°39	2°50	3°48	26°51	10° 8	T 6
F 7	21 0 25	14° 5'07	5♏42	9°40	28°28	12°39	28°52	21°54	5°58	28° 7	25°41	2°51	3°45	26°58	10° 7	F 7
S 8	21 4 21	15° 2'38	17°45	10°58	29°33	13°18	29° 0	21°57	6° 0	28° 7	25°42	2°52	3°41	27° 4	10° 6	S 8
S 9	21 8 18	16° 0'09	0♏ 2	12°14	0♏38	13°56	29° 7	22° 0	6° 3	28° 7	25°44	2°54	3°38	27°11	10° 5	S 9
M10	21 12 14	16°57'42	12°36	13°28	1°42	14°34	29°15	22° 3	6° 6	28°D 7	25°46	2°R54	3°35	27°18	10° 3	M10
T 11	21 16 11	17°55'15	25°32	14°40	2°47	15°13	29°22	22° 5	6° 9	28° 7	25°48	2°54	3°32	27°24	10° 2	T 11
W12	21 20 7	18°52'49	8♏53	15°50	3°51	15°51	29°30	22° 8	6°11	28° 7	25°50	2°53	3°29	27°31	10° 0	W12
T 13	21 24 4	19°50'24	22°41	16°57	4°55	16°29	29°38	22°10	6°14	28° 7	25°52	2°52	3°26	27°38	9°59	T 13
F 14	21 28 1	20°48'00	6♏56	18° 3	5°58	17° 8	29°46	22°13	6°17	28° 8	25°53	2°51	3°22	27°44	9°57	F 14
S 15	21 31 57	21°45'37	21°36	19° 5	7° 2	17°46	29°54	22°15	6°20	28° 8	25°55	2°49	3°19	27°51	9°56	S 15
S 16	21 35 54	22°43'15	6♏35	20° 5	8° 5	18°24	0♏ 2	22°17	6°23	28° 8	25°57	2°48	3°16	27°58	9°54	S 16
M17	21 39 50	23°40'54	21°45	21° 3	9° 8	19° 3	0°10	22°19	6°26	28° 8	25°59	2°48	3°13	28° 4	9°53	M17
T 18	21 43 47	24°38'35	6♏57	21°57	10°10	19°41	0°19	22°21	6°29	28° 8	26° 1	2°D48	3°10	28°11	9°51	T 18
W19	21 47 43	25°36'16	22° 2	22°49	11°13	20°19	0°27	22°23	6°32	28° 9	26° 3	2°48	3° 7	28°18	9°49	W19
T 20	21 51 40	26°34'00	6♏51	23°37	12°15	20°57	0°36	22°24	6°35	28° 9	26° 5	2°48	3° 3	28°24	9°47	T 20
F 21	21 55 36	27°31'44	21°19	24°22	13°16	21°36	0°45	22°26	6°38	28° 9	26° 7	2°49	3° 0	28°31	9°46	F 21
S 22	21 59 33	28°29'31	5♏21	25° 4	14°18	22°14	0°54	22°27	6°42	28°10	26° 9	2°49	2°57	28°38	9°44	S 22
S 23	22 3 30	29°27'19	18°57	25°41	15°19	22°52	1° 3	22°29	6°45	28°10	26°11	2°50	2°54	28°44	9°42	S 23
M24	22 7 26	0♏25'09	2♏ 8	26°15	16°20	23°30	1°12	22°30	6°48	28°10	26°13	2°R50	2°51	28°51	9°40	M24
T 25	22 11 23	1°23'01	14°57	26°45	17°21	24° 8	1°21	22°31	6°51	28°11	26°15	2°50	2°47	28°57	9°38	T 25
W26	22 15 19	2°20'54	27°27	27°10	18°21	24°47	1°30	22°32	6°54	28°11	26°17	2°D49	2°44	29° 4	9°36	W26
T 27	22 19 16	3°18'50	9♏41	27°30	19°21	25°25	1°40	22°33	6°58	28°12	26°20	2°49	2°41	29°11	9°34	T 27
F 28	22 23 12	4°16'47	21°44	27°46	20°21	26° 3	1°49	22°34	7° 1	28°12	26°22	2°50	2°38	29°17	9°32	F 28
S 29	22 27 9	5°14'46	3♌39	27°56	21°20	26°41	1°59	22°35	7° 4	28°13	26°24	2°50	2°35	29°24	9°30	S 29
S 30	22 31 6	6°12'46	15°28	28°R 0	22°19	27°19	2° 9	22°36	7° 8	28°14	26°26	2°50	2°32	29°31	9°28	S 30
M31	22 35 2	7♏10'48	27♌15	27♏59	23♏17	27♌58	2♏19	22♏36	7♏11	28♏14	26♏28	2°R50	2♏28	29♌37	9°Y26	M31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
S 1	18n11	24n24	3n15	11n37	0n36	3n38	0n27	19n 9	1n 8	9s47	1n 8	15n59	2s16	1s38	0n41	18s 6
S 2	17 56	20 53	2 20	10 58	0 28	3 8	0 23	18 59	1 8	9 49	1 7	15 59	2 16	1 39	0 41	18 6
M 3	17 41	16 33	1 19	10 38	0 19	2 38	0 19	18 48	1 8	9 52	1 7	16 0	2 16	1 40	0 41	18 6
T 4	17 25	11 37	0 14	9 39	0 11	2 8	0 14	18 38	1 8	9 55	1 7	16 1	2 16	1 41	0 41	18 6
W 5	17 9	6 17	0s51	8 59	0 2	1 38	0 10	18 28	1 8	9 57	1 7	16 1	2 17	1 42	0 41	18 6
T 6	16 53	0 44	1 53	8 20	0s 7	1 7	0 5	18 17	1 8	10 0	1 7	16 2	2 17	1 44	0 41	18 6
F 7	16 36	4s54	2 52	7 42	0 17	0 37	0 1	18 6	1 8	10 3	1 6	16 2	2 17	1 45	0 41	18 6
S 8	16 20	10 25	3 44	7 3	0 26	0 7	0s 4	17 55	1 8	10 5	1 6	16 3	2 17	1 46	0 41	18 6
S 9	16 3	15 38	4 26	6 25	0 36	0s23	0 9	17 44	1 8	10 8	1 6	16 3	2 17	1 47	0 41	18 6
M10	15 45	20 20	4 57	5 48	0 46	0 53	0 13	17 33	1 8	10 11	1 6	16 4	2 18	1 48	0 41	18 6
T 11	15 28	24 14	5 14	5 11	0 56	1 23	0 18	17 22	1 9	10 14	1 5	16 4	2 18	1 49	0 41	18 6
W12	15 10	26 58	5 15	4 34	1 6	1 53	0 23	17 11	1 9	10 17	1 5	16 5	2 18	1 50	0 41	18 6
T 13	14 52	28 12	4 58	3 59	1 17	2 23	0 29	16 59	1 9	10 20	1 5	16 5	2 18	1 51	0 41	18 6
F 14	14 34	27 38	4 23	3 24	1 27	2 53	0 34	16 48	1 9	10 23	1 5	16 6	2 19	1 53	0 41	18 6
S 15	14 15	25 9	3 29	2 49	1 37	3 23	0 39	16 36	1 9	10 26	1 5	16 6	2 19	1 54	0 41	18 6
S 16	13 57	20 54	2 20	2 16	1 48	3 53	0 44	16 24	1 9	10 29	1 4	16 6	2 19	1 55	0 41	18 6
M17	13 38	15 13	1 1	1 44	1 59	4 23	0 50	16 13	1 9	10 32	1 4	16 7	2 19	1 56	0 41	18 6
T 18	13 19	8 36	0n23	1 13	2 9	4 52	0 55	16 1	1 9	10 35	1 4	16 7	2 19	1 57	0 40	18 6
W19	12 59	1 33	1 45	0 43	2 20	5 22	1 1	15 49	1 9	10 38	1 4	16 7	2 20	1 59	0 40	18 7
T 20	12 40	5n27	2 58	0 14	2 30	5 51	1 6	15 36	1 9	10 42	1 4	16 7	2 20	2 0	0 40	18 7
F 21	12 20	12 0	3 58	0s13	2 41	6 21	1 12	15 24	1 9	10 45	1 3	16 8	2 20	2 1	0 40	18 7
S 22	12 0	17 44	4 42	0 39	2 51	6 50	1 18	15 12	1 9	10 48	1 3	16 8	2 20	2 2	0 40	18 7
S 23	11 40	22 24	5 9	1 3	3 1	7 19	1 23	14 59	1 9	10 51	1 3	16 8	2 20	2 4	0 40	18 7
M24	11 20	25 47	5 18	1 26	3 11	7 48	1 29	14 47	1 9	10 55	1 3	16 8	2 21	2 5	0 40	18 7
T 25	10 59	27 44	5 11	1 46	3 20	8 17	1 35	14 34	1 9	10 58	1 3	16 8	2 21	2 6	0 40	18 7
W26	10 38	28 14	4 49	2 5	3 30	8 45	1 41	14 21	1 9	11 2	1 2	16 8	2 21	2 8	0 40	18 8
T 27	10 18	27 19	4 14	2 21	3 38	9 14	1 47	14 9	1 9	11 5	1 2	16 8	2 21	2 9	0 40	18 8
F 28	9 57	25 8	3 29	2 34	3 47	9 42	1 53	13 56	1 9	11 9	1 2	16 8	2 22	2 10	0 40	18 8
S 29	9 35	21 52	2 35	2 46	3 54	10 10	1 59	13 43	1 9	11 12	1 2	16 8	2 22	2 12	0 40	18 8
S 30	9 14	17 43	1 35	2 54	4 1	10 38	2 5	13 30	1 9	11 16	1 2	16 8	2 22	2 13	0 40	18 8
M31	8n53	12n55	0n31	2s59	4s 8	11s 5	2s12	13n16	1n 9	11s19	1n 1	16n 8	2s22	2s14	0n40	18s 9

Julian Day Number = 2440799.5, Delta T = 40.75 sec
Ecliptic obliquity = 23°26'43, Nutation = 0°00'09, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 24°19'46, Lahiri = 23°26'46

ASTRODIENST EPHEMERIS for the year 1970

geocentric

OCTOBER 1970

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	0 37 15	7♂24'06	11♂48	19♂55	18♂43	17♂39	8♂ 4	22°R 1	9♂ 4	28♂50	27♂37	2°R30	0♂50	3♂ 3	8°R 7	T 1
F 2	0 41 12	8°23'08	24° 2	21°13	19°19	18°17	8°16	21♂58	9° 8	28°51	27°39	2♂24	0°47	3°10	8°Y 4	F 2
S 3	0 45 8	9°22'11	6♂27	22°36	19°52	18°55	8°28	21°55	9°12	28°53	27°41	2°17	0°44	3°17	8° 2	S 3
S 4	0 49 5	10°21'17	19° 3	24° 3	20°25	19°33	8°40	21°52	9°16	28°54	27°43	2°11	0°40	3°23	7°59	S 4
M 5	0 53 1	11°20'25	1♂52	25°35	20°56	20°11	8°53	21°49	9°19	28°56	27°46	2° 5	0°37	3°30	7°56	M 5
T 6	0 56 58	12°19'34	14°55	27° 9	21°26	20°50	9° 5	21°46	9°23	28°58	27°48	2° 0	0°34	3°36	7°54	T 6
W 7	1 0 55	13°18'45	28°13	28°46	21°54	21°28	9°17	21°43	9°27	28°59	27°50	1°57	0°31	3°43	7°51	W 7
T 8	1 4 51	14°17'58	11♂48	0♂25	22°20	22° 6	9°30	21°40	9°31	29° 1	27°52	1°D56	0°28	3°50	7°48	T 8
F 9	1 8 48	15°17'13	25°39	2° 5	22°45	22°44	9°42	21°36	9°35	29° 3	27°54	1°56	0°24	3°56	7°45	F 9
S 10	1 12 44	16°16'30	9♂48	3°47	23° 8	23°22	9°55	21°33	9°38	29° 5	27°56	1°57	0°21	4° 3	7°43	S 10
S 11	1 16 41	17°15'48	24°13	5°30	23°30	24° 0	10° 8	21°29	9°42	29° 6	27°59	1°59	0°18	4°10	7°40	S 11
M12	1 20 37	18°15'08	8♂53	7°14	23°49	24°38	10°20	21°26	9°46	29° 8	28° 1	1°R59	0°15	4°16	7°37	M12
T 13	1 24 34	19°14'29	23°41	8°58	24° 7	25°16	10°33	21°22	9°50	29°10	28° 3	1°57	0°12	4°23	7°35	T 13
W14	1 28 30	20°13'53	8°Y32	10°42	24°23	25°54	10°46	21°18	9°53	29°12	28° 5	1°53	0° 9	4°30	7°32	W14
T 15	1 32 27	21°13'18	23°18	12°27	24°36	26°32	10°58	21°14	9°57	29°14	28° 7	1°47	0° 5	4°36	7°30	T 15
F 16	1 36 24	22°12'46	7♂51	14°11	24°48	27°10	11°11	21°10	10° 1	29°15	28° 9	1°39	0° 2	4°43	7°27	F 16
S 17	1 40 20	23°12'16	22° 4	15°55	24°57	27°48	11°24	21° 7	10° 5	29°17	28°11	1°30	29♂59	4°50	7°24	S 17
S 18	1 44 17	24°11'48	5♂52	17°39	25° 5	28°26	11°37	21° 2	10° 8	29°19	28°13	1°22	29°56	4°56	7°22	S 18
M19	1 48 13	25°11'22	19°13	19°22	25°10	29° 5	11°50	20°58	10°12	29°21	28°15	1°15	29°53	5° 3	7°19	M19
T 20	1 52 10	26°10'59	2♂ 8	21° 6	25°12	29°43	12° 2	20°54	10°16	29°23	28°17	1°10	29°50	5°10	7°17	T 20
W21	1 56 6	27°10'37	14°40	22°48	25°R13	0♂21	12°15	20°50	10°19	29°25	28°19	1° 7	29°46	5°16	7°14	W21
T 22	2 0 3	28°10'19	26°53	24°30	25°11	0°59	12°28	20°46	10°23	29°27	28°21	1°D 6	29°43	5°23	7°12	T 22
F 23	2 3 59	29°10'02	8♂52	26°12	25° 6	1°37	12°41	20°41	10°27	29°29	28°23	1° 7	29°40	5°29	7° 9	F 23
S 24	2 7 56	0♂ 9'47	20°42	27°53	25° 0	2°15	12°54	20°37	10°30	29°31	28°25	1° 7	29°37	5°36	7° 7	S 24
S 25	2 11 53	1° 9'35	2♂29	29°34	24°50	2°53	13° 7	20°33	10°34	29°33	28°27	1°R 8	29°34	5°43	7° 4	S 25
M26	2 15 49	2° 9'25	14°17	1♂14	24°39	3°31	13°20	20°28	10°38	29°35	28°29	1° 7	29°30	5°49	7° 2	M26
T 27	2 19 46	3° 9'17	26°12	2°53	24°25	4° 9	13°34	20°24	10°41	29°37	28°31	1° 4	29°27	5°56	7° 0	T 27
W28	2 23 42	4° 9'11	8♂15	4°32	24° 9	4°47	13°47	20°19	10°45	29°39	28°33	0°58	29°24	6° 3	6°57	W28
T 29	2 27 39	5° 9'07	20°31	6°11	23°50	5°25	14° 0	20°15	10°48	29°41	28°35	0°49	29°21	6° 9	6°55	T 29
F 30	2 31 35	6° 9'05	3♂ 1	7°49	23°29	6° 4	14°13	20°10	10°52	29°43	28°37	0°39	29°18	6°16	6°53	F 30
S 31	2 35 32	7♂ 9'05	15♂44	9♂26	23♂ 6	6♂42	14♂26	20♂ 5	10♂55	29♂46	28♂39	0♂27	29♂15	6♂23	6°Y50	S 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	2s56	7s42	3s18	5n22	1n29	22s38	5s27	5n56	1n 9	13s18	0n57	15n53	2s28	2s59	0n40	18s18
F 2	3 20	13 6	4 4	4 58	1 37	22 53	5 32	5 41	1 9	13 22	0 57	15 52	2 28	3 1	0 40	18 18
S 3	3 43	18 4	4 40	4 31	1 43	23 7	5 38	5 26	1 9	13 26	0 56	15 52	2 29	3 2	0 40	18 19
S 4	4 6	22 20	5 2	4 0	1 47	23 22	5 43	5 11	1 9	13 30	0 56	15 51	2 29	3 4	0 40	18 19
M 5	4 29	25 36	5 10	3 28	1 51	23 35	5 48	4 56	1 9	13 34	0 56	15 50	2 29	3 5	0 40	18 19
T 6	4 52	27 36	5 2	2 53	1 54	23 48	5 53	4 41	1 9	13 38	0 56	15 49	2 29	3 7	0 40	18 20
W 7	5 15	28 4	4 38	2 16	1 56	24 0	5 58	4 26	1 8	13 42	0 56	15 48	2 29	3 8	0 40	18 20
T 8	5 38	26 53	3 58	1 37	1 56	24 12	6 3	4 11	1 8	13 47	0 56	15 47	2 29	3 10	0 40	18 21
F 9	6 1	24 2	3 4	0 57	1 56	24 22	6 7	3 56	1 8	13 51	0 56	15 46	2 29	3 11	0 40	18 21
S 10	6 24	19 41	1 57	0 16	1 55	24 32	6 11	3 41	1 8	13 55	0 56	15 45	2 30	3 13	0 40	18 21
S 11	6 47	14 7	0 42	0s27	1 54	24 42	6 15	3 26	1 8	13 59	0 56	15 44	2 30	3 14	0 40	18 22
M12	7 10	7 40	0n37	1 9	1 52	24 50	6 19	3 10	1 8	14 3	0 55	15 43	2 30	3 16	0 40	18 22
T 13	7 32	0 45	1 55	1 53	1 49	24 58	6 22	2 55	1 8	14 7	0 55	15 42	2 30	3 17	0 40	18 23
W14	7 54	6n12	3 4	2 37	1 46	25 5	6 25	2 40	1 8	14 11	0 55	15 41	2 30	3 19	0 40	18 23
T 15	8 17	12 47	4 1	3 21	1 42	25 11	6 28	2 25	1 8	14 15	0 55	15 40	2 30	3 20	0 40	18 24
F 16	8 39	18 33	4 41	4 5	1 38	25 17	6 31	2 10	1 8	14 19	0 55	15 38	2 30	3 22	0 40	18 24
S 17	9 1	23 9	5 3	4 50	1 33	25 21	6 33	1 54	1 7	14 23	0 55	15 37	2 30	3 23	0 40	18 24
S 18	9 23	26 18	5 6	5 34	1 29	25 25	6 34	1 39	1 7	14 27	0 55	15 36	2 30	3 24	0 40	18 25
M19	9 45	27 51	4 52	6 18	1 23	25 27	6 36	1 24	1 7	14 31	0 55	15 35	2 30	3 26	0 40	18 25
T 20	10 7	27 49	4 23	7 2	1 18	25 29	6 36	1 9	1 7	14 35	0 55	15 34	2 31	3 27	0 40	18 26
W21	10 28	26 20	3 43	7 45	1 12	25 29	6 37	0 53	1 7	14 39	0 55	15 33	2 31	3 29	0 40	18 26
T 22	10 50	23 37	2 53	8 28	1 6	25 28	6 37	0 38	1 7	14 43	0 55	15 32	2 31	3 30	0 40	18 27
F 23	11 11	19 55	1 57	9 11	1 0	25 27	6 36	0 23	1 7	14 47	0 55	15 30	2 31	3 32	0 40	18 27
S 24	11 32	15 29	0 56	9 53	0 54	25 24	6 35	0 7	1 7	14 51	0 54	15 29	2 31	3 33	0 40	18 28
S 25	11 53	10 29	0s 7	10 35	0 48	25 20	6 33	0s 8	1 7	14 55	0 54	15 28	2 31	3 34	0 40	18 28
M26	12 14	5 7	1 10	11 16	0 41	25 14	6 31	0 23	1 6	14 59	0 54	15 27	2 31	3 36	0 40	18 29
T 27	12 34	0s28	2 10	11 56	0 35	25 8	6 27	0 38	1 6	15 3	0 54	15 25	2 31	3 37	0 40	18 29
W28	12 54	6 6	3 5	12 36	0 28	25 0	6 24	0 54	1 6	15 7	0 54	15 24	2 31	3 39	0 40	18 29
T 29	13 15	11 35	3 52	13 15	0 21	24 51	6 19	1 9	1 6	15 11	0 54	15 23	2 31	3 40	0 40	18 30
F 30	13 34	16 43	4 28	13 53	0 15	24 41	6 14	1 24	1 6	15 15	0 54	15 22	2 31	3 41	0 40	18 30
S 31	13s54	21s13	4s52	14s31	0n 8	24s29	6s 8	1s39	1n 6	15s19	0n54	15n20	2s31	3s43	0n40	18s31

Julian Day Number = 2440860.5, Delta T = 40.92 sec
 Ecliptic obliquity = 23°26'44", Nutation = 0°00'08", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 24°19'54", Lahiri = 23°26'55"

ASTRODIENST EPHEMERIS for the year 1970

geocentric

NOVEMBER 1970

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 39 28	8♈ 9'07	28♈42	11♈ 3	22°R41	7♈20	14♈39	20°R 1	10♈59	29♈48	28♈41	0°R15	29♈11	6♈29	6°R48	S 1
M 2	2 43 25	9° 9'11	11♈51	12°40	22♈14	7°58	14°52	19♈56	11° 2	29°50	28°43	0° 3	29° 8	6°36	6°Y46	M 2
T 3	2 47 21	10° 9'17	25°12	14°16	21°45	8°36	15° 6	19°51	11° 6	29°52	28°44	29°54	29° 5	6°43	6°44	T 3
W 4	2 51 18	11° 9'24	8♈44	15°52	21°14	9°14	15°19	19°46	11° 9	29°54	28°46	29°47	29° 2	6°49	6°42	W 4
T 5	2 55 15	12° 9'33	22°25	17°27	20°42	9°52	15°32	19°41	11°13	29°56	28°48	29°44	28°59	6°56	6°40	T 5
F 6	2 59 11	13° 9'43	6♈16	19° 2	20° 9	10°30	15°45	19°37	11°16	29°58	28°50	29°42	28°55	7° 3	6°37	F 6
S 7	3 3 8	14° 9'55	20°16	20°36	19°34	11° 8	15°58	19°32	11°19	0♈ 1	28°51	29°D42	28°52	7° 9	6°35	S 7
S 8	3 7 4	15°10'08	4♈25	22°10	18°59	11°47	16°12	19°27	11°23	0° 3	28°53	29°R42	28°49	7°16	6°33	S 8
M 9	3 11 1	16°10'23	18°42	23°44	18°23	12°25	16°25	19°22	11°26	0° 5	28°55	29°41	28°46	7°22	6°31	M 9
T 10	3 14 57	17°10'39	3♈ 5	25°17	17°46	13° 3	16°38	19°17	11°29	0° 7	28°56	29°38	28°43	7°29	6°30	T 10
W11	3 18 54	18°10'56	17°31	26°50	17°10	13°41	16°51	19°12	11°32	0° 9	28°58	29°31	28°40	7°36	6°28	W11
T 12	3 22 50	19°11'15	1♈54	28°23	16°33	14°19	17° 4	19° 7	11°36	0°12	29° 0	29°22	28°36	7°42	6°26	T 12
F 13	3 26 47	20°11'36	16° 7	29°55	15°57	14°57	17°18	19° 2	11°39	0°14	29° 1	29°11	28°33	7°49	6°24	F 13
S 14	3 30 44	21°11'59	0♈ 7	1♈27	15°22	15°35	17°31	18°58	11°42	0°16	29° 3	28°58	28°30	7°56	6°22	S 14
S 15	3 34 40	22°12'23	13°47	2°59	14°47	16°13	17°44	18°53	11°45	0°18	29° 4	28°46	28°27	8° 2	6°21	S 15
M16	3 38 37	23°12'49	27° 4	4°30	14°13	16°51	17°57	18°48	11°48	0°21	29° 6	28°35	28°24	8° 9	6°19	M16
T 17	3 42 33	24°13'16	9♈59	6° 2	13°41	17°29	18°10	18°43	11°51	0°23	29° 7	28°26	28°21	8°16	6°17	T 17
W18	3 46 30	25°13'46	22°32	7°33	13°11	18° 8	18°24	18°38	11°54	0°25	29° 9	28°20	28°17	8°22	6°16	W18
T 19	3 50 26	26°14'17	4♈46	9° 3	12°42	18°46	18°37	18°33	11°57	0°27	29°10	28°17	28°14	8°29	6°14	T 19
F 20	3 54 23	27°14'50	16°46	10°33	12°14	19°24	18°50	18°29	12° 0	0°30	29°12	28°15	28°11	8°36	6°13	F 20
S 21	3 58 20	28°15'25	28°37	12° 3	11°49	20° 2	19° 3	18°24	12° 3	0°32	29°13	28°15	28° 8	8°42	6°11	S 21
S 22	4 2 16	29°16'01	10♈24	13°33	11°26	20°40	19°16	18°19	12° 6	0°34	29°14	28°15	28° 5	8°49	6°10	S 22
M23	4 6 13	0♈16'39	22°14	15° 2	11° 6	21°18	19°29	18°14	12° 9	0°36	29°16	28°13	28° 1	8°56	6° 9	M23
T 24	4 10 9	1°17'19	4♈11	16°31	10°47	21°56	19°43	18°10	12°12	0°39	29°17	28°10	27°58	9° 2	6° 7	T 24
W25	4 14 6	2°18'00	16°20	18° 0	10°31	22°34	19°56	18° 5	12°14	0°41	29°18	28° 4	27°55	9° 9	6° 6	W25
T 26	4 18 2	3°18'43	28°44	19°28	10°18	23°13	20° 9	18° 0	12°17	0°43	29°19	27°55	27°52	9°15	6° 5	T 26
F 27	4 21 59	4°19'28	11♈27	20°56	10° 7	23°51	20°22	17°56	12°20	0°45	29°21	27°43	27°49	9°22	6° 4	F 27
S 28	4 25 55	5°20'14	24°28	22°23	9°58	24°29	20°35	17°51	12°23	0°48	29°22	27°30	27°46	9°29	6° 3	S 28
S 29	4 29 52	6°21'01	7♈47	23°49	9°52	25° 7	20°48	17°47	12°25	0°50	29°23	27°17	27°42	9°35	6° 2	S 29
M30	4 33 49	7♈21'50	21♈21	25♈14	9♈48	25♈45	21♈ 1	17♈42	12°28	0♈52	29♈24	27°44	27°39	9♈42	6°Y 1	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	14s14	24s47	5s 2	15s 8	0n 1	24s16	6s 2	1s54	1n 6	15s23	0n54	15n19	2s31	3s44	0n40	18s31	1n38	14n45	15n32	11s23	11s46	8n31	5n 4	2n34	
M 2	14 33	27 6	4 56	15 44	0s 6	24 2	5 54	2 10	1 5	15 27	0 54	15 18	2 31	3 45	0 40	18 32	1 38	14 45	15 33	11 27	11 47	8 28	5 3	2 34	
T 3	14 52	27 55	4 34	16 19	0 12	23 46	5 46	2 25	1 5	15 31	0 54	15 17	2 31	3 47	0 40	18 32	1 38	14 44	15 33	11 31	11 48	8 25	5 2	2 34	
W 4	15 11	27 5	3 56	16 54	0 19	23 30	5 37	2 40	1 5	15 35	0 54	15 15	2 31	3 48	0 40	18 33	1 38	14 44	15 34	11 33	11 49	8 22	5 1	2 34	
T 5	15 29	24 36	3 4	17 27	0 26	23 12	5 28	2 55	1 5	15 38	0 54	15 14	2 31	3 49	0 40	18 33	1 37	14 44	15 34	11 34	11 50	8 18	5 0	2 34	
F 6	15 48	20 40	2 1	18 0	0 32	22 53	5 18	3 10	1 5	15 42	0 54	15 13	2 31	3 51	0 40	18 34	1 37	14 43	15 34	11 35	11 51	8 15	4 59	2 33	
S 7	16 6	15 31	0 50	18 32	0 39	22 33	5 7	3 25	1 5	15 46	0 53	15 12	2 31	3 52	0 40	18 34	1 37	14 43	15 35	11 35	11 52	8 12	4 58	2 33	
S 8	16 23	9 30	0n25	19 3	0 45	22 12	4 55	3 40	1 4	15 50	0 53	15 10	2 31	3 53	0 40	18 35	1 37	14 43	15 35	11 35	11 53	8 9	4 57	2 33	
M 9	16 41	2 57	1 39	19 33	0 52	21 50	4 43	3 55	1 4	15 54	0 53	15 9	2 31	3 55	0 40	18 35	1 37	14 42	15 36	11 35	11 54	8 5	4 56	2 33	
T 10	16 58	3n47	2 47	20 1	0 58	21 27	4 30	4 10	1 4	15 58	0 53	15 8	2 31	3 56	0 40	18 36	1 37	14 42	15 36	11 36	11 55	8 2	4 55	2 33	
W11	17 15	10 20	3 44	20 29	1 4	21 4	4 17	4 25	1 4	16 1	0 53	15 6	2 31	3 57	0 40	18 36	1 37	14 42	15 36	11 39	11 57	7 59	4 54	2 33	
T 12	17 32	16 18	4 27	20 56	1 10	20 40	4 3	4 40	1 4	16 5	0 53	15 5	2 31	3 58	0 40	18 37	1 37	14 42	15 37	11 42	11 58	7 55	4 53	2 33	
F 13	17 48	21 20	4 53	21 22	1 16	20 15	3 48	4 55	1 3	16 9	0 53	15 4	2 31	4 0	0 40	18 37	1 37	14 41	15 37	11 46	11 59	7 52	4 52	2 32	
S 14	18 4	25 4	5 0	21 47	1 22	19 51	3 34	5 10	1 3	16 13	0 53	15 3	2 31	4 1	0 40	18 38	1 37	14 41	15 38	11 50	12 0	7 49	4 52	2 32	
S 15	18 19	27 16	4 50	22 11	1 27	19 26	3 19	5 25	1 3	16 16	0 53	15 1	2 31	4 2	0 40	18 38	1 37	14 41	15 38	11 54	12 1	7 46	4 51	2 32	
M16	18 35	27 49	4 25	22 34	1 33	19 2	3 4	5 39	1 3	16 20	0 53	15 0	2 31	4 3	0 40	18 38	1 37	14 41	15 39	11 58	12 2	7 42	4 50	2 32	
T 17	18 50	26 49	3 46	22 56	1 38	18 37	2 48	5 54	1 3	16 24	0 53	14 59	2 31	4 4	0 40	18 39	1 37	14 41	15 39	12 1	12 3	7 39	4 49	2 32	
W18	19 5	24 28	2 57	23 16	1 43	18 13	2 33	6 9	1 2	16 28	0 53	14 58	2 31	4 5	0 40	18 39	1 37	14 40	15 39	12 3	12 4	7 36	4 48	2 31	
T 19	19 19	21 2	2 1	23 35	1 48	17 50	2 17	6 24	1 2	16 31	0 53	14 56	2 30	4 7	0 40	18 40	1 37	14 40	15 40	12 5	12 5	7 32	4 48	2 31	
F 20	19 33	16 47	1 1	23 53	1 53	17 27	2 2	6 38	1 2	16 35	0 53	14 55	2 30	4 8	0 40	18 40	1 37	14 40	15 40	12 5	12 6	7 29	4 47	2 31	
S 21	19 47	11 56	0s 2	24 10	1 57	17 4	1 46	6 53	1 2	16 38	0 53	14 54	2 30	4 9	0 40	18 41	1 37	14 40	15 41	12 5	12 8	7 26	4 46	2 31	
S 22	20 0	6 41	1 4	24 26	2 1	16 43	1 31	7 7	1 1	16 42	0 53	14 53	2 30	4 10	0 40	18 41	1 37	14 40	15 41	12 5	12 9	7 23	4 45	2 31	
M23	20 13	1 12	2 3	24 41	2 5	16 22	1 16	7 22	1 1	16 46	0 53	14 52	2 30	4 11	0 40	18 42	1 37	14 40	15 42	12 6	12 10	7 19	4 45	2 31	
T 24	20 25	4s23	2 58	24 54	2 9	16 2	1 1	7 36	1 1	16 49	0 53	14 50	2 30	4 12	0 40	18 42	1 37	14 40	15 42	12 7	12 11	7 16	4 44	2 30	
W25	20 38	9 53	3 45	25 5	2 12	15 43	0 46	7 51	1 1	16 53	0 53	14 49	2 30	4 13	0 40	18 43	1 37	14 40	15 43	12 9	12 12	7 13	4 43	2 30	
T 26	20 49	15 7	4 23	25 16	2 15	15 25	0 32	8 5	1 1	16 56	0 53	14 48	2 30	4 14	0 40	18 43	1 37	14 40	15 43	12 12	12 13	7 9	4 43	2 30	
F 27	21 1	19 50	4 48	25 25	2 17	15 8	0 18	8 19	1 0	17 0	0 53	14 47	2 30	4 15	0 40	18 44	1 37	14 40	15 44	12 16	12 14	7 6	4 42	2 30	
S 28	21 12	23 44	5 0	25 33	2 20	14 53	0 4	8 34	1 0	17 3	0 53	14 46	2 29	4 16	0 40	18 44	1 37	14 40	15 44	12 21	12 15	7 3	4 41	2 30	
S 29	21 22	26 28	4 55	25 39	2 21	14 38	0n 9	8 48	1 0	17 7	0 53	14 45	2 29	4 17	0 40	18 45	1 37	14 40	15 45	12 25	12 16	6 59	4 41	2 29	
M30	21s33	27s43	4s34	25s44	2s23	14s25	0n22	9s 2	0n59	17s10	0n53	14n44	2s29	4s18	0n40	18s45	1n37	14n40	15n45	12s30	12s17	6n56	4n40	2n29	

ASTRODIENST EPHEMERIS for the year 1970

geocentric

DECEMBER 1970

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	4 37 45	8°22'40	5°38' 8	26°39' 9	9°D47	26°23' 21	11°14' 17	17°R38	12°30' 12	0°54' 29	29°25' 26	26°R54	27°36' 27	9°49' 6	6°R 0	T 1
W 2	4 41 42	9°23'31	19° 4	28° 3	9°M48	27° 1	21°27' 17	17°33' 12	12°33' 0	0°57' 29	29°26' 26	26°46' 27	27°33' 9	5°55' 5	5°Y59	W 2
T 3	4 45 38	10°24'23	3°44' 4	29°25' 9	9°52' 27	27°39' 21	21°40' 17	17°29' 12	12°35' 0	0°59' 29	29°27' 26	26°42' 27	27°30' 10	2° 5	5°58' T	T 3
F 4	4 49 35	11°25'15	17° 8	0°34' 29	9°58' 28	28°17' 21	21°53' 17	17°25' 12	12°38' 1°	1° 29	29°28' 26	26°40' 27	27°27' 10	9° 5	5°57' F	F 4
S 5	4 53 31	12°26'09	1°13' 13	2° 6	10° 6	28°56' 22	22° 5	17°21' 12	12°40' 1°	3° 29	29°29' 26	26°D39	27°23' 10	15° 5	5°57' S	S 5
S 6	4 57 28	13°27'03	15°18' 3	24°10' 16	29°34' 22	22°18' 17	17°17' 12	12°42' 1°	6° 29	29°30' 26	26°R40	27°20' 10	22° 5	5°56' S	S 6	
M 7	5 1 24	14°27'58	29°23' 4	39°10' 29	0°M12	22°31' 17	17°12' 12	12°45' 1°	8° 29	29°31' 26	26°39' 27	27°17' 10	29° 5	5°55' M	M 7	
T 8	5 5 21	15°28'53	13°Y26	5°53' 10	44°05' 0	22°44' 17	17° 8	12°47' 1°	10° 29	29°32' 26	26°36' 27	27°14' 10	35° 5	5°55' T	T 8	
W 9	5 9 18	16°29'49	27°26' 7	3°11' 1	1°28' 22	25°56' 17	5°12°49' 1°	12°49' 1°	12° 29	29°33' 26	26°30' 27	27°11' 10	42° 5	5°54' W	W 9	
T 10	5 13 14	17°30'46	11°B21	8°10' 11	19°2° 6	23° 9	17° 1	12°51' 1°	14° 29	29°33' 26	26°22' 27	27° 7	49° 5	5°54' T	T 10	
F 11	5 17 11	18°31'44	25° 8	9°14' 11	40°2°44' 23	22°16°57' 12	53°1°17' 29	34°26°11' 27	4°10°55' 5	53°1°17' 29	34°26°11' 27	4°10°55' 5	53°1°17' 29	34°26°11' 27	4°10°55' 5	F 11
S 12	5 21 7	19°32'43	8°II43	10°13' 12	3°22' 23	34°16°53' 12	55°1°19' 29	35°26° 27	1°11° 2	5°53' S	S 12					
S 13	5 25 4	20°33'42	22° 4	11° 7	12°28' 4°	0°23°47' 16	50°12°57' 1°	21°29°36' 25	48°26°58' 11	8°5°53' S	S 13					
M14	5 29 0	21°34'42	5°7	11°56' 12	54°4°38' 23	59°16°46' 12	59°16°46' 12	59°16°46' 12	59°16°46' 12	59°16°46' 12	59°16°46' 12	59°16°46' 12	59°16°46' 12	59°16°46' 12	59°16°46' 12	M14
T 15	5 32 57	22°35'43	17°52' 12	38°13°22' 5	17°52' 12	38°13°22' 5	17°52' 12	38°13°22' 5	17°52' 12	38°13°22' 5	17°52' 12	38°13°22' 5	17°52' 12	38°13°22' 5	17°52' 12	T 15
W16	5 36 54	23°36'45	0°Q20	13°13' 13	52°5°55' 24	24°16°39' 13	3°1°27' 29	37°25°23' 26	48°11°28' 5	52°W16	W16					
T 17	5 40 50	24°37'47	12°32' 13	40°14°23' 6	33°24°37' 16	36°13° 5	1°30' 29	38°25°20' 26	45°11°35' 5	52°T 17	T 17					
F 18	5 44 47	25°38'51	24°31' 13	57°14°56' 7	11°24°49' 16	33°13° 6	1°32' 29	39°25°D19	26°42' 11	42°5°D52' F	F 18					
S 19	5 48 43	26°39'55	6°II22	14°R 5	15°31' 7	49°25° 1	16°29' 13	8°1°34' 29	39°25°20' 26	39°11°48' 5	52°S 19	S 19				
S 20	5 52 40	27°41'00	18°10' 14	3°16° 6	8°27' 25	13°16°26' 13	10°1°36' 29	40°25°21' 26	36°11°55' 5	52°S 20	S 20					
M21	5 56 36	28°42'06	29°59' 13	48°16°43' 9	5°25°25' 16	23°16°23' 13	11°1°38' 29	40°25°R21	26°33' 12	2°5°52' M	M21					
T 22	6 0 33	29°43'12	11°A56	13°23' 17	22°9°43' 25	38°16°20' 13	13°1°40' 29	40°25°20' 26	29°12° 8	5°53' T	T 22					
W23	6 4 29	0°34'42	24° 6	12°45' 18	2°10°21' 25	50°16°18' 13	14°1°42' 29	41°25°17' 26	26°12°15' 5	53°W23	W23					
T 24	6 8 26	1°45'28	6°M31	11°56' 18	42°10°59' 26	2°16°15' 13	16°1°44' 29	41°25°12' 26	23°12°22' 5	53°T 24	T 24					
F 25	6 12 22	2°46'37	19°23' 10	57°19°25' 11	37°16°13' 12	12°16°12' 13	17°1°46' 29	41°25° 5	26°20' 12	28°5°53' F	F 25					
S 26	6 16 19	3°47'46	2°A31	9°49' 20	8°12°15' 26	25°16°10' 13	19°1°48' 29	42°24°56' 26	17°12°35' 5	54°S 26	S 26					
S 27	6 20 16	4°48'56	16° 5	8°34' 20	52°12°53' 26	37°16° 8	13°20' 1°	50°29°42' 24	47°26°13' 12	42°5°54' S	S 27					
M28	6 24 12	5°50'06	29°59' 7	14°21°37' 13	31°26°49' 16	5°13°21' 1°	52°29°42' 24	38°26°10' 12	48°5°55' M	M28	M28					
T 29	6 28 9	6°51'17	14°B11	5°52' 22	24°14°10' 27	0°16° 3	13°22' 1°	54°29°42' 24	31°26° 7	55°T 29	T 29					
W30	6 32 5	7°52'28	28°34' 4	30°23°11' 14	48°27°12' 16	1°13°23' 1°	56°29°42' 24	26°26° 4	13° 2	5°56' W	W30					
T 31	6 36 2	8°53'38	13°A2	3°12' 23	59°15°M26' 27	24°15°B59' 13	24°15°B59' 13	24°15°B59' 13	24°15°B59' 13	24°15°B59' 13	24°15°B59' 13	24°15°B59' 13	24°15°B59' 13	24°15°B59' 13	24°15°B59' 13	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
T 1	21s42	27s17	3s57	25s48	2s24	14s12	0n34	9s16	0n59	17s14	0n53	14n43	2s29	4s19	0n40	T 1
W 2	21 52	25 8	3 5	25 50	2 24	14 1	0 46	9 30	0 59	17 17	0 53	14 42	2 29	4 20	0 40	W 2
T 3	22 1	21 27	2 1	25 51	2 24	13 51	0 58	9 44	0 59	17 20	0 53	14 41	2 29	4 21	0 41	T 3
F 4	22 9	16 30	0 50	25 50	2 24	13 43	1 9	9 58	0 58	17 24	0 53	14 40	2 28	4 22	0 41	F 4
S 5	22 17	10 40	0n24	25 48	2 22	13 35	1 20	10 11	0 58	17 27	0 53	14 39	2 28	4 23	0 41	S 5
S 6	22 25	4 18	1 37	25 45	2 21	13 28	1 30	10 25	0 58	17 30	0 53	14 38	2 28	4 24	0 41	S 6
M 7	22 32	2n16	2 44	25 40	2 18	13 23	1 40	10 39	0 58	17 33	0 53	14 37	2 28	4 25	0 41	M 7
T 8	22 39	8 42	3 41	25 33	2 15	13 18	1 50	10 52	0 57	17 37	0 53	14 36	2 28	4 26	0 41	T 8
W 9	22 46	14 41	4 25	25 26	2 10	13 15	1 59	11 6	0 57	17 40	0 53	14 35	2 28	4 26	0 41	W 9
T 10	22 51	19 52	4 52	25 17	2 5	13 13	2 8	11 19	0 57	17 43	0 53	14 34	2 27	4 27	0 41	T 10
F 11	22 57	23 56	5 2	25 7	1 59	13 11	2 16	11 33	0 56	17 46	0 53	14 33	2 27	4 28	0 41	F 11
S 12	23 2	26 37	4 55	24 55	1 53	13 11	2 24	11 46	0 56	17 49	0 53	14 32	2 27	4 29	0 41	S 12
S 13	23 7	27 44	4 32	24 43	1 45	13 11	2 31	11 59	0 56	17 52	0 53	14 31	2 27	4 29	0 41	S 13
M14	23 11	27 15	3 54	24 30	1 35	13 12	2 38	12 12	0 55	17 55	0 53	14 31	2 26	4 30	0 41	M14
T 15	23 14	25 19	3 6	24 15	1 25	13 14	2 45	12 25	0 55	17 59	0 53	14 30	2 26	4 31	0 41	T 15
W16	23 17	22 11	2 9	24 1	1 14	13 17	2 51	12 38	0 54	18 2	0 53	14 29	2 26	4 32	0 41	W16
T 17	23 20	18 8	1 8	23 45	1 1	13 21	2 57	12 51	0 54	18 5	0 53	14 28	2 26	4 32	0 41	T 17
F 18	23 22	13 25	0 4	23 29	0 47	13 25	3 2	13 4	0 54	18 8	0 53	14 28	2 26	4 33	0 41	F 18
S 19	23 24	8 16	0s59	23 13	0 31	13 30	3 8	13 16	0 54	18 10	0 53	14 27	2 25	4 34	0 41	S 19
S 20	23 25	2 51	1 59	22 57	0 15	13 35	3 13	13 29	0 53	18 13	0 53	14 26	2 25	4 34	0 41	S 20
M21	23 26	2s40	2 55	22 41	0n 3	13 41	3 17	13 41	0 53	18 16	0 53	14 26	2 25	4 35	0 41	M21
T 22	23 27	8 9	3 44	22 25	0 22	13 48	3 21	13 54	0 53	18 19	0 53	14 25	2 25	4 35	0 41	T 22
W23	23 27	13 25	4 23	22 9	0 41	13 55	3 25	14 6	0 52	18 22	0 53	14 25	2 24	4 36	0 41	W23
T 24	23 26	18 17	4 51	21 54	1 1	14 3	3 29	14 18	0 52	18 25	0 53	14 24	2 24	4 36	0 41	T 24
F 25	23 25	22 27	5 5	21 39	1 21	14 11	3 32	14 30	0 51	18 27	0 53	14 24	2 24	4 37	0 41	F 25
S 26	23 23	25 38	5 4	21 25	1 40	14 19	3 35	14 42	0 51	18 30	0 53	14 23	2 24	4 37	0 41	S 26
S 27	23 21	27 27	4 46	21 12	1 59	14 28	3 38	14 54	0 51	18 33	0 53	14 23	2 23	4 38	0 41	S 27
M28	23 19	27 38	4 11	20 59	2 16	14 37	3 40	15 6	0 50	18 36	0 53	14 22	2 23	4 38	0 41	M28
T 29	23 16	26 0	3 20	20 48	2 31	14 47	3 43	15 18	0 50	18 38	0 53	14 22	2 23	4 39	0 41	T 29
W30	23 13	22 39	2 15	20 38	2 44	14 57	3 45	15 29	0 49	18 41	0 53	14 22	2 23	4 39	0 41	W30
T 31	23s 9	17s53	1s 1	20s30	2n55	15s 7	3n46	15s41	0n49	18s43	0n53	14n21	2s22	4s39	0n41	T 31

Julian Day Number = 2440921.5, Delta T = 41.09 sec
 Ecliptic obliquity = 23°26'42", Nutation = 0°00'08", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 24°20'03", Lahiri = 23°27'03"