



Astrodienst Ephemeris Tables for the year 1445

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 D5EPH

ASTRODIENST EPHEMERIS for the year 1445
geocentric

JANUARY 1445 JC

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	7 17 2	19°47'56	18°43'	25°43'	4°26'	11°33'	18°R52	12°R14	21°R 6	16°R57	25°R55	0°D12	28°R52	1°Y35	3°R56	F 1
S 2	7 20 59	20°49'02	2°M34	26°41'	5°17'	11°50'	18°D44	12°D 9	21°II 4	16°M56	25°D54	0°II13	28°48'	1°42'	3°D56	S 2
S 3	7 24 55	21°50'08	16°24'	27°42'	6° 9'	12°37'	18°36'	12° 4'	21° 2'	16°56'	25°52'	0°14'	28°45'	1°49'	3°56'	S 3
M 4	7 28 52	22°51'13	0°X 3	28°46'	7° 2'	13°25'	18°28'	11°59'	21° 0'	16°55'	25°51'	0°R14	28°42'	1°56'	3°D56	M 4
T 5	7 32 48	23°52'18	13°33'	29°52'	7°55'	14°12'	18°20'	11°54'	20°58'	16°54'	25°50'	0°14'	28°39'	2° 2'	3°56'	T 5
W 6	7 36 45	24°53'22	26°52'	1°Z 1	8°49'	15° 0'	18°12'	11°50'	20°56'	16°53'	25°48'	0°10'	28°36'	2° 9'	3°56'	W 6
T 7	7 40 41	25°54'26	10°Z 0	2°11'	9°43'	15°47'	18° 4'	11°45'	20°54'	16°52'	25°47'	0° 5'	28°32'	2°16'	3°56'	T 7
F 8	7 44 38	26°55'29	22°57'	3°24'	10°38'	16°35'	17°56'	11°40'	20°52'	16°51'	25°46'	29°R56	28°29'	2°22'	3°56'	F 8
S 9	7 48 35	27°56'31	5°M41	4°38'	11°34'	17°22'	17°48'	11°36'	20°50'	16°51'	25°44'	29°46'	28°26'	2°29'	3°57'	S 9
S 10	7 52 31	28°57'32	18°13'	5°54'	12°30'	18° 9'	17°40'	11°31'	20°48'	16°50'	25°43'	29°34'	28°23'	2°36'	3°57'	S 10
M 11	7 56 28	29°58'32	0°X32	7°11'	13°27'	18°57'	17°32'	11°26'	20°47'	16°49'	25°41'	29°22'	28°20'	2°42'	3°57'	M 11
T 12	8 0 24	0°M59'31	12°39'	8°30'	14°24'	19°44'	17°25'	11°22'	20°45'	16°48'	25°40'	29°12'	28°17'	2°49'	3°58'	T 12
W 13	8 4 21	2° 0'28	24°37'	9°50'	15°22'	20°32'	17°17'	11°17'	20°43'	16°46'	25°39'	29° 3'	28°13'	2°56'	3°58'	W 13
T 14	8 8 17	3° 1'25	6°Y28	11°11'	16°20'	21°19'	17°10'	11°13'	20°41'	16°45'	25°37'	28°57'	28°10'	3° 3'	3°59'	T 14
F 15	8 12 14	4° 2'20	18°17'	12°33'	17°19'	22° 6'	17° 2'	11° 9'	20°40'	16°44'	25°36'	28°53'	28° 7'	3° 9'	4° 0'	F 15
S 16	8 16 10	5° 3'14	0°X 9	13°56'	18°18'	22°54'	16°55'	11° 4'	20°38'	16°43'	25°35'	28°D52	28° 4'	3°16'	4° 0'	S 16
S 17	8 20 7	6° 4'06	12° 8'	15°21'	19°18'	23°41'	16°48'	11° 0'	20°36'	16°42'	25°33'	28°52'	28° 1'	3°23'	4° 1'	S 17
M 18	8 24 4	7° 4'57	24°21'	16°46'	20°18'	24°28'	16°40'	10°56'	20°35'	16°41'	25°32'	28°R52	27°58'	3°29'	4° 2'	M 18
T 19	8 28 0	8° 5'46	6°II52	18°12'	21°18'	25°16'	16°33'	10°52'	20°33'	16°40'	25°31'	28°52'	27°54'	3°36'	4° 3'	T 19
W 20	8 31 57	9° 6'35	19°39'	19°39'	22°19'	26° 3'	16°26'	10°48'	20°32'	16°38'	25°29'	28°50'	27°51'	3°43'	4° 4'	W 20
T 21	8 35 53	10° 7'21	3°D 6	21° 7'	23°20'	26°50'	16°20'	10°44'	20°30'	16°37'	25°28'	28°46'	27°48'	3°49'	4° 5'	T 21
F 22	8 39 50	11° 8'06	16°53'	22°36'	24°22'	27°38'	16°13'	10°40'	20°29'	16°36'	25°27'	28°39'	27°45'	3°56'	4° 6'	F 22
S 23	8 43 46	12° 8'50	1°Q 6	24° 6'	25°24'	28°25'	16° 6'	10°36'	20°28'	16°35'	25°26'	28°29'	27°42'	4° 3'	4° 8'	S 23
S 24	8 47 43	13° 9'32	15°40'	25°37'	26°26'	29°12'	16° 0'	10°32'	20°26'	16°33'	25°24'	28°18'	27°38'	4° 9'	4° 9'	S 24
M 25	8 51 39	14°10'13	0°M29	27° 9'	27°29'	29°59'	15°53'	10°28'	20°25'	16°32'	25°23'	28° 6'	27°35'	4°16'	4°10'	M 25
T 26	8 55 36	15°10'53	15°22'	28°41'	28°32'	0°X47	15°47'	10°25'	20°24'	16°31'	25°22'	27°56'	27°32'	4°23'	4°12'	T 26
W 27	8 59 33	16°11'31	0°Q11	0°M14	29°35'	1°34'	15°41'	10°21'	20°23'	16°29'	25°20'	27°47'	27°29'	4°30'	4°13'	W 27
T 28	9 3 29	17°12'08	14°50'	1°49'	0°Z38	2°21'	15°35'	10°18'	20°22'	16°28'	25°19'	27°41'	27°26'	4°36'	4°15'	T 28
F 29	9 7 26	18°12'43	29°12'	3°24'	1°42'	3° 8'	15°29'	10°14'	20°21'	16°26'	25°18'	27°38'	27°23'	4°43'	4°16'	F 29
S 30	9 11 22	19°13'18	13°M17	5° 0'	2°46'	3°56'	15°24'	10°11'	20°20'	16°25'	25°17'	27°37'	27°19'	4°50'	4°18'	S 30
S 31	9 15 19	20°M13'51	27°M 2	6°M36	3°Z50	4°X43	15°D18	10°D 8	20°II19	16°M24	25°D16	27°R37	27°R16	4°Y56	4°R19	S 31

Delta T = 06m38s

Julian Calendar 1 Jan. 1445 == Greg. Calendar 10 Jan. 1445

FEBRUARY 1445 JC

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	9 19 15	21°M14'23	10°X30	8°M14	4°Z55	5°X30	15°R13	10°R 5	20°R18	16°R22	25°R14	27°R37	27°R13	5°Y 3	4°R21	M 1
T 2	9 23 12	22°14'54	23°42'	9°53'	6° 0'	6°17'	15°D 8	10°D 2	20°II17	16°M21	25°D13	27°R35	27°10'	5°10'	4°23'	T 2
W 3	9 27 8	23°15'24	6°Z41	11°32'	7° 5'	7° 4'	15° 3'	9°59'	20°16'	16°19'	25°12'	27°30'	27° 7'	5°16'	4°25'	W 3
T 4	9 31 5	24°15'52	19°29'	13°13'	8°10'	7°51'	14°58'	9°56'	20°15'	16°18'	25°11'	27°22'	27° 4'	5°23'	4°27'	T 4
F 5	9 35 2	25°16'19	2°M 6	14°54'	9°16'	8°38'	14°53'	9°53'	20°15'	16°16'	25°10'	27°12'	27° 0'	5°30'	4°29'	F 5
S 6	9 38 58	26°16'44	14°33'	16°37'	10°21'	9°25'	14°49'	9°51'	20°14'	16°15'	25° 9'	26°59'	26°57'	5°37'	4°31'	S 6
S 7	9 42 55	27°17'07	26°50'	18°20'	11°27'	10°12'	14°44'	9°48'	20°13'	16°13'	25° 7'	26°44'	26°54'	5°43'	4°33'	S 7
M 8	9 46 51	28°17'28	8°X59	20° 4'	12°33'	10°59'	14°40'	9°46'	20°13'	16°12'	25° 6'	26°29'	26°51'	5°50'	4°35'	M 8
T 9	9 50 48	29°17'48	21° 0'	21°50'	13°40'	11°46'	14°36'	9°43'	20°12'	16°10'	25° 5'	26°16'	26°48'	5°57'	4°37'	T 9
W 10	9 54 44	0°X18'06	2°Y54	23°36'	14°46'	12°33'	14°33'	9°41'	20°12'	16° 8'	25° 4'	26° 4'	26°44'	6° 3'	4°39'	W 10
T 11	9 58 41	1°18'22	14°43'	25°23'	15°53'	13°20'	14°29'	9°39'	20°12'	16° 7'	25° 3'	25°55'	26°41'	6°10'	4°42'	T 11
F 12	10 2 37	2°18'36	26°31'	27°12'	17° 0'	14° 7'	14°26'	9°37'	20°11'	16° 5'	25° 2'	25°50'	26°38'	6°17'	4°44'	F 12
S 13	10 6 34	3°18'47	8°Z22	29° 1'	18° 7'	14°54'	14°22'	9°35'	20°11'	16° 4'	25° 1'	25°47'	26°35'	6°23'	4°46'	S 13
S 14	10 10 30	4°18'57	20°19'	0°X51	19°14'	15°41'	14°19'	9°33'	20°11'	16° 2'	25° 0'	25°46'	26°32'	6°30'	4°49'	S 14
M 15	10 14 27	5°19'05	2°II28	2°43'	20°21'	16°27'	14°16'	9°31'	20°11'	16° 0'	24°59'	25°45'	26°29'	6°37'	4°51'	M 15
T 16	10 18 24	6°19'11	14°55'	4°35'	21°29'	17°14'	14°14'	9°30'	20°11'	15°59'	24°58'	25°45'	26°25'	6°43'	4°54'	T 16
W 17	10 22 20	7°19'14	27°44'	6°29'	22°36'	18° 1'	14°11'	9°28'	20°10'	15°57'	24°57'	25°44'	26°22'	6°50'	4°56'	W 17
T 18	10 26 17	8°19'16	11°D 1	8°23'	23°44'	18°48'	14° 9'	9°27'	20°D10	15°55'	24°56'	25°40'	26°19'	6°57'	4°59'	T 18
F 19	10 30 13	9°19'15	24°47'	10°18'	24°52'	19°34'	14° 7'	9°26'	20°11'	15°54'	24°55'	25°34'	26°16'	7° 4'	5° 2'	F 19
S 20	10 34 10	10°19'12	9°Q 3	12°14'	26° 0'	20°21'	14° 5'	9°24'	20°11'	15°52'	24°54'	25°25'	26°13'	7°10'	5° 5'	S 20
S 21	10 38 6	11°19'07	23°46'	14°11'	27° 8'	21° 7'	14° 3'	9°23'	20°11'	15°50'	24°53'	25°15'	26°10'	7°17'	5° 7'	S 21
M 22	10 42 3	12°19'00	8°M48	16° 9'	28°16'	21°54'	14° 2'	9°22'	20°11'	15°49'	24°53'	25° 4'	26° 6'	7°24'	5°10'	M 22
T 23	10 46 0	13°18'50	24° 0'	18° 7'	29°25'	22°40'	14° 0'	9°21'	20°11'	15°47'	24°52'	24°53'	26° 3'	7°30'	5°13'	T 23
W 24	10 49 56	14°18'39	9°Q11	20° 5'	0°M33	23°27'	13°59'	9°21'	20°12'	15°46'	24°51'	24°45'	26° 0'	7°37'	5°16'	W 24
T 25	10 53 53	15°18'26	24°12'	22° 4'	1°42'	24°13'	13°58'	9°20'	20°12'	15°44'	24°50'	24°39'	25°57'	7°44'	5°19'	T 25
F 26	10 57 49	16°18'11	8°M53	24° 2'	2°51'	25° 0'	13°58'	9°20'	20°12'	15°42'	24°49'	24°36'	25°54'	7°50'	5°22'	F 26
S 27	11 1 46	17°17'55	23°12'	26° 0'	3°59'	25°46'	13°57'	9°19'	20°13'	15°41'	24°49'	24°D35	25°50'	7°57'	5°25'	S 27
S 28	11 5 42	18°X17'36	7°X 6	27°X58	5°M 8	26°X32	13°D57	9°D19	20°II13	15°M39	24°D48	24°R36	25°R47	8°Y 4	5°R28	S 28

Delta T = 06m38s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1445

geocentric

MARCH 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	11 9 39	19°17'16	20°36'36	29°55'55	6°18'18	27°19'19	13°D57	9°R19	20°II14	15°R37	24°R47	24°R36	25°B44	8°Y10	5°B31	M 1
T 2	11 13 35	20°16'55	3°34'45	1°Y51	7°27'27	28°5'5	13°B57	9°D19	20°15'15	15°M36	24°B46	24°B35	25°41'41	8°17'17	5°34'34	T 2
W 3	11 17 32	21°16'32	16°35'35	3°45'45	8°36'36	28°51'51	13°57'57	9°B19	20°15'15	15°34'34	24°46'46	24°32'32	25°38'38	8°24'24	5°38'38	W 3
T 4	11 21 28	22°16'06	29°10'10	5°37'37	9°45'45	29°37'37	13°57'57	9°19'19	20°16'16	15°32'32	24°45'45	24°27'27	25°35'35	8°30'30	5°41'41	T 4
F 5	11 25 25	23°15'39	11°33'33	7°27'27	10°55'55	0°Y23	13°58'58	9°19'19	20°17'17	15°31'31	24°45'45	24°19'19	25°31'31	8°37'37	5°44'44	F 5
S 6	11 29 22	24°15'10	23°46'46	9°14'14	12°4'4	1°10'10	13°59'59	9°19'19	20°18'18	15°29'29	24°44'44	24°8'8	25°28'28	8°44'44	5°48'48	S 6
S 7	11 33 18	25°14'39	5°52'52	10°58'58	13°14'14	1°56'56	14°0'0	9°20'20	20°19'19	15°27'27	24°43'43	23°57'57	25°25'25	8°51'51	5°51'51	S 7
M 8	11 37 15	26°14'06	17°50'50	12°38'38	14°24'24	2°42'42	14°1'1	9°20'20	20°20'20	15°26'26	24°43'43	23°46'46	25°22'22	8°57'57	5°54'54	M 8
T 9	11 41 11	27°13'31	29°44'44	14°13'13	15°34'34	3°28'28	14°2'2	9°21'21	20°21'21	15°24'24	24°42'42	23°35'35	25°19'19	9°4'4	5°58'58	T 9
W10	11 45 8	28°12'54	11°Y35	15°45'45	16°43'43	4°13'13	14°4'4	9°22'22	20°22'22	15°22'22	24°42'42	23°26'26	25°15'15	9°11'11	6°1'1	W10
T 11	11 49 4	29°12'15	23°23'23	17°11'11	17°53'53	4°59'59	14°6'6	9°23'23	20°23'23	15°21'21	24°41'41	23°19'19	25°12'12	9°17'17	6°5'5	T 11
F 12	11 53 1	0°Y11'34	5°B12	18°32'32	19°3'3	5°45'45	14°8'8	9°24'24	20°24'24	15°19'19	24°41'41	23°15'15	25°9'9	9°24'24	6°8'8	F 12
S 13	11 56 57	1°10'50	17°5'5	19°47'47	20°14'14	6°31'31	14°10'10	9°25'25	20°25'25	15°18'18	24°40'40	23°13'13	25°6'6	9°31'31	6°12'12	S 13
S 14	12 0 54	2°10'04	29°4'4	20°57'57	21°24'24	7°17'17	14°12'12	9°26'26	20°26'26	15°16'16	24°40'40	23°D13	25°3'3	9°37'37	6°15'15	S 14
M15	12 4 51	3°9'16	11°II14	22°0'0	22°34'34	8°2'2	14°15'15	9°28'28	20°28'28	15°14'14	24°40'40	23°14'14	25°0'0	9°44'44	6°19'19	M15
T 16	12 8 47	4°8'26	23°40'40	22°57'57	23°44'44	8°48'48	14°17'17	9°29'29	20°29'29	15°13'13	24°39'39	23°15'15	24°56'56	9°51'51	6°23'23	T 16
W17	12 12 44	5°7'33	6°B26	23°47'47	24°54'54	9°34'34	14°20'20	9°31'31	20°30'30	15°11'11	24°39'39	23°R15	24°53'53	9°57'57	6°26'26	W17
T 18	12 16 40	6°6'38	19°36'36	24°31'31	26°5'5	10°19'19	14°23'23	9°32'32	20°32'32	15°10'10	24°39'39	23°15'15	24°50'50	10°4'4	6°30'30	T 18
F 19	12 20 37	7°5'41	3°B15	25°8'8	27°15'15	11°5'5	14°26'26	9°34'34	20°33'33	15°8'8	24°38'38	23°12'12	24°47'47	10°11'11	6°34'34	F 19
S 20	12 24 33	8°4'41	17°22'22	25°38'38	28°26'26	11°50'50	14°30'30	9°36'36	20°35'35	15°7'7	24°38'38	23°7'7	24°44'44	10°17'17	6°38'38	S 20
S 21	12 28 30	9°3'39	1°M58	26°1'1	29°36'36	12°36'36	14°33'33	9°38'38	20°37'37	15°5'5	24°38'38	23°1'1	24°41'41	10°24'24	6°42'42	S 21
M22	12 32 26	10°2'35	16°56'56	26°17'17	0°X47	13°21'21	14°37'37	9°40'40	20°38'38	15°4'4	24°38'38	22°55'55	24°37'37	10°31'31	6°45'45	M22
T 23	12 36 23	11°1'28	2°A9	26°26'26	1°58'58	14°6'6	14°41'41	9°43'43	20°40'40	15°2'2	24°38'38	22°48'48	24°34'34	10°37'37	6°49'49	T 23
W24	12 40 20	12°0'19	17°27'27	26°R29	3°8'8	14°52'52	14°45'45	9°45'45	20°42'42	15°1'1	24°37'37	22°43'43	24°31'31	10°44'44	6°53'53	W24
T 25	12 44 16	12°59'09	2°M38	26°25'25	4°19'19	15°37'37	14°49'49	9°47'47	20°43'43	14°59'59	24°37'37	22°40'40	24°28'28	10°51'51	6°57'57	T 25
F 26	12 48 13	13°57'56	17°34'34	26°15'15	5°30'30	16°22'22	14°54'54	9°50'50	20°45'45	14°58'58	24°37'37	22°D39	24°25'25	10°58'58	7°1'1	F 26
S 27	12 52 9	14°56'42	2°X7	25°59'59	6°41'41	17°7'7	14°58'58	9°52'52	20°47'47	14°57'57	24°37'37	22°39'39	24°21'21	11°4'4	7°5'5	S 27
S 28	12 56 6	15°55'26	16°14'14	25°38'38	7°52'52	17°52'52	15°3'3	9°55'55	20°49'49	14°55'55	24°37'37	22°40'40	24°18'18	11°11'11	7°9'9	S 28
M29	13 0 2	16°54'08	29°54'54	25°11'11	9°3'3	18°37'37	15°8'8	9°58'58	20°51'51	14°54'54	24°D37	22°41'41	24°15'15	11°18'18	7°13'13	M29
T 30	13 3 59	17°52'49	13°B9	24°41'41	10°14'14	19°22'22	15°13'13	10°1'1	20°53'53	14°53'53	24°37'37	22°R42	24°12'12	11°24'24	7°17'17	T 30
W31	13 7 55	18°Y51'28	26°B1	24°Y6	11°X25	20°Y7	15°B18	10°B4	20°II55	14°M51	24°B37	22°B42	24°B9	11°Y31	7°B21	W31

Delta T = 06m38s

Julian Calendar 1 March 1445 == Greg. Calendar 10 March 1445

APRIL 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	13 11 52	19°Y50'05	8°33'33	23°R29	12°X36	20°Y52	15°B24	10°B7	20°II57	14°R50	24°B37	22°R41	24°B6	11°Y38	7°B25	T 1
F 2	13 15 49	20°48'40	20°51'51	22°Y49	13°47'47	21°37'37	15°29'29	10°10'10	20°59'59	14°M49	24°37'37	22°B38	24°2'2	11°44'44	7°29'29	F 2
S 3	13 19 45	21°47'14	2°X57	22°8'8	14°58'58	22°22'22	15°35'35	10°14'14	21°1'1	14°47'47	24°37'37	22°33'33	23°59'59	11°51'51	7°33'33	S 3
S 4	13 23 42	22°45'46	14°54'54	21°25'25	16°10'10	23°7'7	15°41'41	10°17'17	21°4'4	14°46'46	24°38'38	22°28'28	23°56'56	11°58'58	7°37'37	S 4
M 5	13 27 38	23°44'16	26°47'47	20°43'43	17°21'21	23°51'51	15°47'47	10°21'21	21°6'6	14°45'45	24°38'38	22°23'23	23°53'53	12°4'4	7°41'41	M 5
T 6	13 31 35	24°42'44	8°Y36	20°2'2	18°32'32	24°36'36	15°53'53	10°24'24	21°8'8	14°44'44	24°38'38	22°18'18	23°50'50	12°11'11	7°45'45	T 6
W 7	13 35 31	25°41'11	20°25'25	19°22'22	19°44'44	25°21'21	15°59'59	10°28'28	21°11'11	14°43'43	24°38'38	22°14'14	23°46'46	12°18'18	7°49'49	W 7
T 8	13 39 28	26°39'35	2°B16	18°45'45	20°55'55	26°5'5	16°6'6	10°32'32	21°13'13	14°41'41	24°38'38	22°11'11	23°43'43	12°24'24	7°53'53	T 8
F 9	13 43 24	27°37'58	14°10'10	18°10'10	22°6'6	26°50'50	16°13'13	10°36'36	21°15'15	14°40'40	24°39'39	22°10'10	23°40'40	12°31'31	7°58'58	F 9
S 10	13 47 21	28°36'19	26°9'9	17°38'38	23°18'18	27°34'34	16°19'19	10°40'40	21°18'18	14°39'39	24°39'39	22°D10	23°37'37	12°38'38	8°2'2	S 10
S 11	13 51 17	29°34'38	8°II16	17°10'10	24°29'29	28°19'19	16°26'26	10°44'44	21°20'20	14°38'38	24°39'39	22°11'11	23°34'34	12°44'44	8°6'6	S 11
M12	13 55 14	0°B32'55	20°34'34	16°47'47	25°41'41	29°3'3	16°33'33	10°48'48	21°23'23	14°37'37	24°40'40	22°12'12	23°31'31	12°51'51	8°10'10	M12
T 13	13 59 11	1°31'10	3°B7	16°27'27	26°52'52	29°47'47	16°40'40	10°52'52	21°25'25	14°36'36	24°40'40	22°14'14	23°27'27	12°58'58	8°14'14	T 13
W14	14 3 7	2°29'23	15°56'56	16°12'12	28°4'4	0°B32	16°48'48	10°56'56	21°28'28	14°35'35	24°40'40	22°15'15	23°24'24	13°4'4	8°18'18	W14
T 15	14 7 4	3°27'34	29°5'5	16°2'2	29°16'16	1°16'16	16°55'55	11°1'1	21°31'31	14°34'34	24°41'41	22°R15	23°21'21	13°11'11	8°23'23	T 15
F 16	14 11 0	4°25'43	12°B38	15°56'56	0°Y27	2°0'0	17°3'3	11°5'5	21°33'33	14°33'33	24°41'41	22°15'15	23°18'18	13°18'18	8°27'27	F 16
S 17	14 14 57	5°23'50	26°35'35	15°D56	1°39'39	2°44'44	17°10'10	11°10'10	21°36'36	14°32'32	24°42'42	22°14'14	23°15'15	13°24'24	8°31'31	S 17
S 18	14 18 53	6°21'55	10°M55	16°0'0	2°50'50	3°28'28	17°18'18	11°14'14	21°39'39	14°31'31	24°42'42	22°13'13	23°12'12	13°31'31	8°35'35	S 18
M19	14 22 50	7°19'58	25°38'38	16°9'9	4°2'2	4°12'12	17°26'26	11°19'19	21°41'41	14°30'30	24°43'43	22°11'11	23°8'8	13°38'38	8°39'39	M19
T 20	14 26 46	8°17'58	10°B36	16°22'22	5°14'14	4°56'56	17°34'34	11°24'24	21°44'44	14°29'29	24°43'43	22°9'9	23°5'5	13°44'44	8°44'44	T 20
W21	14 30 43	9°15'58	25°42'42	16°40'40	6°26'26	5°40'40	17°42'42	11°29'29	21°47'47	14°29'29	24°44'44	22°8'8	23°2'2	13°51'51	8°48'48	W21
T 22	14 34 40	10°13'55	10°M47	17°3'3	7°37'37	6°24'24	17°51'51	11°34'34	21°50'50	14°28'28	24°44'44	22°7'7	22°59'59	13°58'58	8°52'52	T 22
F 23	14 38 36	11°11'51	25°43'43	17°29'29	8°49'49	7°7'7	17°59'59	11°39'39	21°53'53	14°27'27	24°45'45	22°D7	22°56'56	14°5'5	8°56'56	F 23
S 24	14 42 33	12°9'45	10°X21	18°0'0	10°1'1	7°51'51	18°8'8	11°44'44	21°56'56	14°26'26	24°46'46	22°7'7	22°52'52	14°11'11	9°0'0	S 24
S 25	14 46 29	13°7'39	24°36'36	18°35'35	11°13'13	8°35'35	18°16'16	11°49'49	21°59'59	14°26'26	24°46'46	22°8'8	22°49'49	14°18'18	9°5'5	S 25
M26	14 50 26	14°5'30	8°B25	19°14'14	12°25'25	9°18'18	18°25'25	11°55'55	22°2'2	14°25'25	24°47'47	22°9'9	22°46'46	14°25'25	9°9'9	M26
T 27	14 54 22	15°3'21	21°48'48	19°57'57	13°37'37	10°2'2	18°34'34	12°0'0	22°5'5	14°24'24	24°48'48	22°10'10	22°43'43	14°31'31	9°13'13	T 27
W28	14 58 19	16°1'10	4°A45	20°43'43	14°49'49	10°45'45	18°43'43	12°5'5	22°8'8	14°24'24	24°49'49	22°R10	22°40'40	14°38'38	9°17'17	W28
T 29	15 2 16	16°58'58	17°21'21	21°33'33	16°0'0	11°29'29	18°52'52	12°11'11	22°11'11	14°23'23	24°49'49	22°10'10	22°37'37	14°45'45	9°21'21	T 29
F 30	15 6 12	17°56'45	29°A39	22°Y26	17°Y12	12°B12	19°B1	12°B16	22°II14	14°M23	24°B50	22°B10	22°B33	14°Y51	9°B25	F 30

ASTRODIENST EPHEMERIS for the year 1445

geocentric

MAY 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	15 10 9	18°54'31	11°44	23°23	18°24	12°56	19°51	12°22	22°17	14°R22	24°51	22°R10	22°30	14°Y58	9°30	S 1
S 2	15 14 5	19°52'15	23°39	24°22	19°36	13°39	19°20	12°28	22°20	14°M22	24°52	22°R 9	22°27	15° 5	9°34	S 2
M 3	15 18 2	20°49'58	5°Y29	25°25	20°49	14°22	19°30	12°33	22°23	14°21	24°53	22° 9	22°24	15°11	9°38	M 3
T 4	15 21 58	21°47'40	17°18	26°31	22° 1	15° 5	19°39	12°39	22°27	14°21	24°53	22°D 9	22°21	15°18	9°42	T 4
W 5	15 25 55	22°45'21	29° 8	27°39	23°13	15°48	19°49	12°45	22°30	14°20	24°54	22° 9	22°18	15°25	9°46	W 5
T 6	15 29 51	23°43'01	11°R 3	28°51	24°25	16°32	19°59	12°51	22°33	14°20	24°55	22° 9	22°14	15°31	9°50	T 6
F 7	15 33 48	24°40'39	23° 5	0°R 5	25°37	17°15	20° 9	12°57	22°36	14°20	24°56	22°R 9	22°11	15°38	9°54	F 7
S 8	15 37 44	25°38'17	5°II16	1°22	26°49	17°58	20°19	13° 3	22°40	14°19	24°57	22° 9	22° 8	15°45	9°59	S 8
S 9	15 41 41	26°35'53	17°37	2°42	28° 1	18°41	20°29	13° 9	22°43	14°19	24°58	22° 9	22° 5	15°51	10° 3	S 9
M10	15 45 38	27°33'28	0°E11	4° 4	29°13	19°23	20°39	13°15	22°46	14°19	24°59	22° 8	22° 2	15°58	10° 7	M10
T 11	15 49 34	28°31'02	12°58	5°29	0°R26	20° 6	20°50	13°22	22°49	14°19	25° 0	22° 8	21°58	16° 5	10°11	T 11
W12	15 53 31	29°28'34	25°59	6°56	1°38	20°49	21° 0	13°28	22°53	14°18	25° 1	22° 7	21°55	16°11	10°15	W12
T 13	15 57 27	0°II26'05	9°R17	8°26	2°50	21°32	21°10	13°34	22°56	14°18	25° 2	22° 6	21°52	16°18	10°19	T 13
F 14	16 1 24	1°23'34	22°51	9°58	4° 2	22°14	21°21	13°41	23° 0	14°18	25° 3	22° 6	21°49	16°25	10°23	F 14
S 15	16 5 20	2°21'02	6°M43	11°33	5°15	22°57	21°32	13°47	23° 3	14°18	25° 5	22°D 5	21°46	16°31	10°27	S 15
S 16	16 9 17	3°18'29	20°52	13°11	6°27	23°40	21°42	13°54	23° 6	14°18	25° 6	22° 6	21°43	16°38	10°31	S 16
M17	16 13 14	4°15'55	5°A16	14°51	7°39	24°22	21°53	14° 0	23°10	14°D18	25° 7	22° 7	21°39	16°45	10°35	M17
T 18	16 17 10	5°13'19	19°52	16°33	8°52	25° 5	22° 4	14° 7	23°13	14°18	25° 8	22° 8	21°36	16°51	10°39	T 18
W19	16 21 7	6°10'42	4°M36	18°18	10° 4	25°47	22°15	14°14	23°17	14°18	25° 9	22° 8	21°33	16°58	10°43	W19
T 20	16 25 3	7° 8'04	19°21	20° 5	11°16	26°29	22°26	14°20	23°20	14°18	25°10	22°R 9	21°30	17° 5	10°46	T 20
F 21	16 29 0	8° 5'25	4°X 1	21°55	12°29	27°12	22°37	14°27	23°24	14°18	25°12	22° 9	21°27	17°11	10°50	F 21
S 22	16 32 56	9° 2'45	18°30	23°47	13°41	27°54	22°48	14°34	23°27	14°18	25°13	22° 8	21°24	17°18	10°54	S 22
S 23	16 36 53	10° 0'05	2°R41	25°41	14°53	28°36	23° 0	14°41	23°31	14°19	25°14	22° 6	21°20	17°25	10°58	S 23
M24	16 40 49	10°57'24	16°30	27°38	16° 6	29°18	23°11	14°48	23°34	14°19	25°15	22° 3	21°17	17°31	11° 2	M24
T 25	16 44 46	11°54'42	29°56	29°37	17°18	0°II 0	23°22	14°55	23°38	14°19	25°17	22° 1	21°14	17°38	11° 6	T 25
W26	16 48 43	12°52'00	12°A57	1°II38	18°31	0°42	23°34	15° 2	23°41	14°19	25°18	21°58	21°11	17°45	11° 9	W26
T 27	16 52 39	13°49'17	25°37	3°41	19°43	1°24	23°45	15° 9	23°45	14°20	25°19	21°56	21° 8	17°51	11°13	T 27
F 28	16 56 36	14°46'34	7°R57	5°46	20°56	2° 6	23°57	15°16	23°48	14°20	25°21	21°55	21° 4	17°58	11°17	F 28
S 29	17 0 32	15°43'51	20° 3	7°53	22° 8	2°48	24° 9	15°23	23°52	14°20	25°22	21°D55	21° 1	18° 5	11°20	S 29
S 30	17 4 29	16°41'07	1°Y58	10° 1	23°21	3°30	24°20	15°30	23°56	14°21	25°23	21°56	20°58	18°11	11°24	S 30
M31	17 8 25	17°II38'22	13°Y48	12°II10	24°R34	4°II12	24°E32	15°E37	23°II59	14°M21	25°E25	21°R57	20°R55	18°Y18	11°R28	M31

Delta T = 06m38s

Julian Calendar 1 May 1445 == Greg. Calendar 10 May 1445

JUNE 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	17 12 22	18°II35'38	25°Y38	14°II20	25°R46	4°II53	24°E44	15°E44	24°II 3	14°M22	25°E26	21°R59	20°R52	18°Y25	11°R31	T 1
W 2	17 16 18	19°32'53	7°R31	16°31	26°59	5°35	24°56	15°52	24° 6	14°22	25°28	22° 0	20°49	18°31	11°35	W 2
T 3	17 20 15	20°30'08	19°31	18°43	28°12	6°17	25° 8	15°59	24°10	14°23	25°29	22°R 1	20°45	18°38	11°38	T 3
F 4	17 24 12	21°27'23	1°II43	20°54	29°24	6°58	25°20	16° 6	24°13	14°23	25°30	22° 1	20°42	18°45	11°42	F 4
S 5	17 28 8	22°24'37	14° 7	23° 6	0°II37	7°40	25°32	16°14	24°17	14°24	25°32	21°59	20°39	18°51	11°45	S 5
S 6	17 32 5	23°21'51	26°46	25°17	1°50	8°21	25°44	16°21	24°21	14°25	25°33	21°56	20°36	18°58	11°49	S 6
M 7	17 36 1	24°19'05	9°E40	27°27	3° 3	9° 3	25°56	16°28	24°24	14°25	25°35	21°51	20°33	19° 5	11°52	M 7
T 8	17 39 58	25°16'18	22°49	29°37	4°15	9°44	26° 8	16°36	24°28	14°26	25°36	21°46	20°30	19°11	11°55	T 8
W 9	17 43 54	26°13'31	6°R11	19°E46	5°28	10°25	26°21	16°43	24°31	14°27	25°38	21°41	20°26	19°18	11°59	W 9
T 10	17 47 51	27°10'44	19°47	3°53	6°41	11° 7	26°33	16°51	24°35	14°27	25°39	21°36	20°23	19°25	12° 2	T 10
F 11	17 51 47	28° 7'56	3°M33	5°59	7°54	11°48	26°45	16°58	24°39	14°28	25°41	21°32	20°20	19°31	12° 5	F 11
S 12	17 55 44	29° 5'07	17°30	8° 3	9° 7	12°29	26°58	17° 6	24°42	14°29	25°42	21°30	20°17	19°38	12° 8	S 12
S 13	17 59 41	0°52'18	1°A35	10° 6	10°20	13°10	27°10	17°13	24°46	14°30	25°44	21°D30	20°14	19°45	12°15	S 13
M14	18 3 37	0°59'29	15°46	12° 7	11°32	13°51	27°23	17°21	24°49	14°31	25°45	21°30	20°10	19°51	12°15	M14
T 15	18 7 34	1°56'39	0°M 3	14° 6	12°45	14°32	27°35	17°29	24°53	14°32	25°47	21°32	20° 7	19°58	12°18	T 15
W16	18 11 30	2°53'49	14°23	16° 3	13°58	15°13	27°48	17°36	24°57	14°33	25°49	21°R33	20° 4	20° 5	12°21	W16
T 17	18 15 27	3°50'59	28°43	17°58	15°11	15°54	28° 0	17°44	25° 0	14°33	25°50	21°33	20° 1	20°11	12°24	T 17
F 18	18 19 23	4°48'08	12°X59	19°51	16°24	16°35	28°13	17°51	25° 4	14°34	25°52	21°31	19°58	20°18	12°27	F 18
S 19	18 23 20	5°45'18	27° 7	21°43	17°37	17°16	28°26	17°59	25° 7	14°36	25°53	21°27	19°55	20°25	12°30	S 19
S 20	18 27 17	6°42'27	11°R 1	23°32	18°50	17°57	28°38	18° 7	25°11	14°37	25°55	21°22	19°51	20°31	12°33	S 20
M21	18 31 13	7°39'37	24°40	25°19	20° 3	18°37	28°51	18°14	25°14	14°38	25°57	21°15	19°48	20°38	12°35	M21
T 22	18 35 10	8°36'47	7°A59	27° 4	21°16	19°18	29° 4	18°22	25°18	14°39	25°58	21° 7	19°45	20°45	12°38	T 22
W23	18 39 6	9°33'57	20°57	28°48	22°30	19°59	29°17	18°30	25°21	14°40	26° 0	20°59	19°42	20°51	12°41	W23
T 24	18 43 3	10°31'08	3°R36	0°R29	23°43	20°39	29°29	18°38	25°25	14°41	26° 2	20°52	19°39	20°58	12°44	T 24
F 25	18 46 59	11°28'19	15°57	2° 8	24°56	21°20	29°42	18°45	25°28	14°42	26° 3	20°47	19°36	21° 5	12°46	F 25
S 26	18 50 56	12°25'30	28° 2	3°45	26° 9	22° 0	29°55	18°53	25°32	14°43	26° 5	20°44	19°32	21°11	12°49	S 26
S 27	18 54 52	13°22'42	9°Y58	5°20	27°22	22°41	0°R 8	19° 1	25°35	14°45	26° 7	20°D43	19°29	21°18	12°52	S 27
M28	18 58 49	14°19'55	21°48	6°54	28°35	23°21	0°21	19° 9	25°39	14°46	26° 8	20°43	19°26	21°25	12°54	M28
T 29	19 2 46	15°17'08	3°R38	8°25	29°49	24° 1	0°34	19°16	25°42	14°47	26°10	20°44	19°23	21°31	12°56	T 29
W30	19 6 42	16°E14'22	15°R33	9°R54	1°E 2	24°II42	0°R47	19°E24	25°II46	14°M49	26°E12	20°R45	19°R20	21°Y38	12°R59	W30

Delta T = 06m38s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1445
geocentric

JULY 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	19 10 39	17°51'37	27°38'38	11°21'21	25°15'15	25°22'22	1°0'0	19°32'32	25°49'49	14°50'50	26°13'13	20°R45	19°16'16	21°45'45	13°8'8	T 1
F 2	19 14 35	18° 8'52	9°11'57	12°46'46	3°29'29	26° 2'2	1°13'13	19°40'40	25°52'52	14°51'51	26°15'15	20°B43	19°13'13	21°51'51	13° 4'4	F 2
S 3	19 18 32	19° 6'08	22°33'33	14° 9'9	4°42'42	26°42'42	1°26'26	19°48'48	25°56'56	14°53'53	26°17'17	20°39'39	19°10'10	21°58'58	13° 6'6	S 3
S 4	19 22 28	20° 3'25	5°58'28	15°30'30	5°56'56	27°22'22	1°39'39	19°55'55	25°59'59	14°54'54	26°18'18	20°32'32	19° 7'7	22° 5'5	13° 8'8	S 4
M 5	19 26 25	21° 0'43	18°43'43	16°48'48	7° 9'9	28° 3'3	1°52'52	20° 3'3	26° 3'3	14°56'56	26°20'20	20°24'24	19° 4'4	22°11'11	13°10'10	M 5
T 6	19 30 21	21°58'01	2°16'16	18° 5'5	8°22'22	28°43'43	2° 5'5	20°11'11	26° 6'6	14°57'57	26°22'22	20°14'14	19° 1'1	22°18'18	13°12'12	T 6
W 7	19 34 18	22°55'19	16° 5'5	19°19'19	9°36'36	29°23'23	2°19'19	20°19'19	26° 9'9	14°59'59	26°23'23	20° 4'4	18°57'57	22°25'25	13°14'14	W 7
T 8	19 38 15	23°52'38	0°11'11	20°30'30	10°49'49	0°52'52	2°32'32	20°26'26	26°12'12	15° 0'0	26°25'25	19°55'55	18°54'54	22°31'31	13°16'16	T 8
F 9	19 42 11	24°49'58	14°12'12	21°40'40	12° 3'3	0°42'42	2°45'45	20°34'34	26°16'16	15° 2'2	26°27'27	19°47'47	18°51'51	22°38'38	13°18'18	F 9
S 10	19 46 8	25°47'18	28°24'24	22°46'46	13°17'17	1°22'22	2°58'58	20°42'42	26°19'19	15° 3'3	26°29'29	19°42'42	18°48'48	22°45'45	13°20'20	S 10
S 11	19 50 4	26°44'38	12°35'35	23°50'50	14°30'30	2° 2'2	3°11'11	20°50'50	26°22'22	15° 5'5	26°30'30	19°40'40	18°45'45	22°51'51	13°22'22	S 11
M 12	19 54 1	27°41'59	26°45'45	24°52'52	15°44'44	2°42'42	3°24'24	20°58'58	26°25'25	15° 7'7	26°32'32	19°D39	18°42'42	22°58'58	13°24'24	M 12
T 13	19 57 57	28°39'20	10°15'52	25°50'50	16°57'57	3°21'21	3°38'38	21° 5'5	26°29'29	15° 8'8	26°34'34	19°39'39	18°38'38	23° 5'5	13°26'26	T 13
W 14	20 1 54	29°36'42	24°54'54	26°46'46	18°11'11	4° 1'1	3°51'51	21°13'13	26°32'32	15°10'10	26°35'35	19°R39	18°35'35	23°11'11	13°27'27	W 14
T 15	20 5 50	0°13'40'5	8°52'52	27°39'39	19°25'25	4°41'41	4° 4'4	21°21'21	26°35'35	15°12'12	26°37'37	19°38'38	18°32'32	23°18'18	13°29'29	T 15
F 16	20 9 47	1°31'28	22°42'42	28°28'28	20°38'38	5°20'20	4°17'17	21°28'28	26°38'38	15°13'13	26°39'39	19°34'34	18°29'29	23°25'25	13°31'31	F 16
S 17	20 13 44	2°28'52	6°35'25	29°14'14	21°52'52	6° 0'0	4°30'30	21°36'36	26°41'41	15°15'15	26°40'40	19°28'28	18°26'26	23°31'31	13°32'32	S 17
S 18	20 17 40	3°26'17	19°57'57	29°57'57	23° 6'6	6°39'39	4°44'44	21°44'44	26°44'44	15°17'17	26°42'42	19°19'19	18°22'22	23°38'38	13°34'34	S 18
M 19	20 21 37	4°23'43	3°36'16	0°11'36	24°20'20	7°18'18	4°57'57	21°52'52	26°47'47	15°18'18	26°44'44	19° 8'8	18°19'19	23°45'45	13°35'35	M 19
T 20	20 25 33	5°21'10	16°20'20	1°11'11	25°33'33	7°58'58	5°10'10	21°59'59	26°50'50	15°20'20	26°46'46	18°56'56	18°16'16	23°51'51	13°36'36	T 20
W 21	20 29 30	6°18'38	29° 8'8	1°42'42	26°47'47	8°37'37	5°23'23	22° 7'7	26°53'53	15°22'22	26°47'47	18°44'44	18°13'13	23°58'58	13°38'38	W 21
T 22	20 33 26	7°16'07	11°40'40	2° 8'8	28° 1'1	9°16'16	5°36'36	22°14'14	26°56'56	15°24'24	26°49'49	18°33'33	18°10'10	24° 5'5	13°39'39	T 22
F 23	20 37 23	8°13'37	23°56'56	2°31'31	29°15'15	9°55'55	5°50'50	22°22'22	26°59'59	15°26'26	26°51'51	18°24'24	18° 7'7	24°11'11	13°40'40	F 23
S 24	20 41 19	9°11'08	5°15'59	2°48'48	0°12'29	10°35'35	6° 3'3	22°30'30	27° 2'2	15°28'28	26°52'52	18°18'18	18° 3'3	24°18'18	13°41'41	S 24
S 25	20 45 16	10° 8'41	17°53'53	3° 1'1	1°43'43	11°14'14	6°16'16	22°37'37	27° 5'5	15°29'29	26°54'54	18°14'14	18° 0'0	24°25'25	13°42'42	S 25
M 26	20 49 13	11° 6'16	29°42'42	3° 8'8	2°57'57	11°53'53	6°29'29	22°45'45	27° 8'8	15°31'31	26°56'56	18°12'12	17°57'57	24°31'31	13°43'43	M 26
T 27	20 53 9	12° 3'51	11°32'32	3°R11	4°11'11	12°32'32	6°42'42	22°52'52	27°10'10	15°33'33	26°57'57	18°12'12	17°54'54	24°38'38	13°44'44	T 27
W 28	20 57 6	13° 1'29	23°27'27	3° 8'8	5°25'25	13°11'11	6°56'56	23° 0'0	27°13'13	15°35'35	26°59'59	18°12'12	17°51'51	24°45'45	13°45'45	W 28
T 29	21 1 2	13°59'08	5°11'33	2°59'59	6°39'39	13°50'50	7° 9'9	23° 7'7	27°16'16	15°37'37	27° 1'1	18°11'11	17°48'48	24°51'51	13°46'46	T 29
F 30	21 4 59	14°56'48	17°55'55	2°45'45	7°53'53	14°29'29	7°22'22	23°15'15	27°19'19	15°39'39	27° 2'2	18° 8'8	17°44'44	24°58'58	13°46'46	F 30
S 31	21 8 55	15°54'30	0°53'37	2°11'25	9°17'7	15°58'8	7°13'35	23°52'22	27°21'21	15°41'41	27°54'4	18°B3	17°B41	25°17'4	13°B47	S 31

Delta T = 06m37s

Julian Calendar 1 July 1445 == Greg. Calendar 10 July 1445

AUGUST 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	21 12 52	16°52'14	13°54'43	2°R 0	10°12'21	15°54'46	7°14'48	23°52'29	27°11'24	15°43'43	27°55'5	17°R56	17°B38	25°11'11	13°B48	S 1
M 2	21 16 48	17°49'59	27°13'13	1°11'29	11°35'35	16°25'25	8° 1'1	23°37'37	27°26'26	15°45'45	27° 7'7	17°B46	17°35'35	25°18'18	13°48'48	M 2
T 3	21 20 45	18°47'46	11°16'6	0°54'54	12°50'50	17° 4'4	8°14'14	23°44'44	27°29'29	15°47'47	27° 9'9	17°35'35	17°32'32	25°24'24	13°49'49	T 3
W 4	21 24 42	19°45'34	25°18'18	0°13'13	14° 4'4	17°43'43	8°28'28	23°51'51	27°32'32	15°49'49	27°10'10	17°23'23	17°28'28	25°31'31	13°49'49	W 4
T 5	21 28 38	20°43'23	9°11'44	29°12'28	15°18'18	18°21'21	8°41'41	23°59'59	27°34'34	15°51'51	27°12'12	17°12'12	17°25'25	25°38'38	13°50'50	T 5
F 6	21 32 35	21°41'14	24°18'18	28°40'40	16°32'32	19° 0'0	8°54'54	24° 6'6	27°36'36	15°53'53	27°13'13	17° 3'3	17°22'22	25°44'44	13°50'50	F 6
S 7	21 36 31	22°39'06	8°51'51	27°48'48	17°47'47	19°38'38	9° 7'7	24°13'13	27°39'39	15°55'55	27°15'15	16°56'56	17°19'19	25°51'51	13°50'50	S 7
S 8	21 40 28	23°36'59	23°20'20	26°55'55	19° 1'1	20°17'17	9°20'20	24°20'20	27°41'41	15°57'57	27°17'17	16°53'53	17°16'16	25°58'58	13°50'50	S 8
M 9	21 44 24	24°34'54	7°11'39	26° 0'0	20°15'15	20°55'55	9°33'33	24°27'27	27°44'44	16° 0'0	27°18'18	16°51'51	17°13'13	26° 4'4	13°50'50	M 9
T 10	21 48 21	25°32'50	21°47'47	25° 6'6	21°30'30	21°34'34	9°46'46	24°34'34	27°46'46	16° 2'2	27°20'20	16°51'51	17° 9'9	26°11'11	13°R50	T 10
W 11	21 52 17	26°30'47	5°14'42	24°12'12	22°44'44	22°12'12	9°59'59	24°42'42	27°48'48	16° 4'4	27°21'21	16°51'51	17° 6'6	26°18'18	13°50'50	W 11
T 12	21 56 14	27°28'46	19°26'26	23°21'21	23°58'58	22°50'50	10°11'11	24°49'49	27°50'50	16° 6'6	27°23'23	16°50'50	17° 3'3	26°24'24	13°50'50	T 12
F 13	22 0 11	28°26'46	2°35'58	22°34'34	25°13'13	23°29'29	10°24'24	24°55'55	27°53'53	16° 8'8	27°24'24	16°46'46	17° 0'0	26°31'31	13°50'50	F 13
S 14	22 4 7	29°24'47	16°18'18	21°51'51	26°27'27	24° 7'7	10°37'37	25° 2'2	27°55'55	16°10'10	27°26'26	16°39'39	16°57'57	26°38'38	13°50'50	S 14
S 15	22 8 4	0°11'22'50	29°28'28	21°14'14	27°41'41	24°45'45	10°50'50	25° 9'9	27°57'57	16°12'12	27°27'27	16°30'30	16°54'54	26°44'44	13°50'50	S 15
M 16	22 12 0	1°20'54	12°35'25	20°43'43	28°56'56	25°23'23	11° 3'3	25°16'16	27°59'59	16°15'15	27°29'29	16°19'19	16°50'50	26°51'51	13°49'49	M 16
T 17	22 15 57	2°19'00	25°10'10	20°20'20	0°11'25	26° 1'1	11°15'15	25°23'23	28° 1'1	16°17'17	27°30'30	16° 7'7	16°47'47	26°58'58	13°49'49	T 17
W 18	22 19 53	3°17'08	7°14'43	20° 4'4	1°25'25	26°39'39	11°28'28	25°30'30	28° 3'3	16°19'19	27°32'32	15°54'54	16°44'44	27° 4'4	13°49'49	W 18
T 19	22 23 50	4°15'17	20° 3'3	19°D56	2°39'39	27°17'17	11°41'41	25°36'36	28° 5'5	16°21'21	27°33'33	15°43'43	16°41'41	27°11'11	13°48'48	T 19
F 20	22 27 46	5°13'28	2°11'11	19°58'58	3°54'54	27°55'55	11°54'54	25°43'43	28° 7'7	16°23'23	27°34'34	15°33'33	16°38'38	27°18'18	13°47'47	F 20
S 21	22 31 43	6°11'41	14° 9'9	20° 8'8	5° 8'8	28°33'33	12° 6'6	25°49'49	28° 8'8	16°25'25	27°36'36	15°27'27	16°34'34	27°24'24	13°47'47	S 21
S 22	22 35 40	7° 9'56	26° 0'0	20°26'26	6°23'23	29°11'11	12°19'19	25°56'56	28°10'10	16°28'28	27°37'37	15°22'22	16°31'31	27°31'31	13°46'46	S 22
M 23	22 39 36	8° 8'13	7°B47	20°54'54	7°37'37	29°49'49	12°31'31	26° 2'2	28°12'12	16°30'30	27°39'39	15°21'21	16°28'28	27°38'38	13°45'45	M 23
T 24	22 43 33	9° 6'32	19°35'35	21°30'30	8°52'52	0°12'26	12°44'44	26° 9'9	28°14'14	16°32'32	27°40'40	15°D20	16°25'25	27°44'44	13°45'45	T 24
W 25	22 47 29	10° 4'53	1°11'29	22°15'15	10° 7'7	1° 4'4	12°56'56	26°15'15	28°15'15	16°34'34	27°41'41	15°21'21	16°22'22	27°51'51	13°44'44	W 25
T 26	22 51 26	11° 3'16	13°33'33	23° 8'8	11°21'21	1°42'42	13° 8'8	26°22'22	28°17'17	16°37'37	27°43'43	15°R21	16°19'19	27°57'57	13°43'43	T 26
F 27	22 55 22	12° 1'42	25°54'54	24° 8'8	12°36'36	2°19'19	13°21'21	26°28'28	28°18'18	16°39'39	27°44'44	15°20'20	16°15'15	28° 4'4	13°42'42	F 27
S 28	22 59 19	13° 0'09	8°53'36	25°15'15	13°51'51	2°57'57	13°33'33	26°34'34	28°20'20	16°41'41	27°45'45	15°17'17	16°12'12	28°11'11	13°41'41	S 28
S 29	23 3 15	13°58'39	21°44'44	26°29'29	15° 5'5	3°35'35	13°45'45	26°40'40	28°21'21	16°43'43	27°46'46	15°12'12	16° 9'9	28°17'17	13°40'40	S 29
M 30	23 7 12	14°57'11	5°19'19	27°48'48	16°20'20	4°12'12	13°58'58	26°46'46	28°23'23	16°45'45	27°48'48	15° 5'5	16° 6'6	28°24'24	13°38'38	M 30
T 31	23 11 9	15°11'55'45	19°12'21	29°13'13	17°11'35	4°14'49	14°10'10	26°52'52	28°11'24	16°11'48	27°54'49	14°B56	16°B 3	28°13'31	13°B37	T 31

ASTRODIENST EPHEMERIS for the year 1445

geocentric

SEPTEMBER 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	23 15 5	16 ^h 54'21"	3 ^h 48'	0 ^h 43'	18 ^h 49'	5 ^h 27'	14 ^h 22'	26 ^h 58'	28 ^h 25'	16 ^h 50'	27 ^h 50'	14 ^h R46	15 ^h 59'	28 ^h 37'	13 ^h R36	W 1
T 2	23 19 2	17 ^h 52'59"	18 ^h 33'	2 ^h 17'	20 ^h 4'	6 ^h 4'	14 ^h 34'	27 ^h 4'	28 ^h 27'	16 ^h 52'	27 ^h 51'	14 ^h B38	15 ^h 56'	28 ^h 44'	13 ^h B35	T 2
F 3	23 22 58	18 ^h 51'39"	3 ^h 48'	3 ^h 54'	21 ^h 19'	6 ^h 41'	14 ^h 46'	27 ^h 10'	28 ^h 28'	16 ^h 54'	27 ^h 52'	14 ^h 30'	15 ^h 53'	28 ^h 51'	13 ^h 33'	F 3
S 4	23 26 55	19 ^h 50'21"	18 ^h 25'	5 ^h 34'	22 ^h 34'	7 ^h 19'	14 ^h 58'	27 ^h 16'	28 ^h 29'	16 ^h 57'	27 ^h 54'	14 ^h 26'	15 ^h 50'	28 ^h 57'	13 ^h 32'	S 4
S 5	23 30 51	20 ^h 49'05"	3 ^h 48'	7 ^h 17'	23 ^h 48'	7 ^h 56'	15 ^h 10'	27 ^h 21'	28 ^h 30'	16 ^h 59'	27 ^h 55'	14 ^h 23'	15 ^h 47'	29 ^h 4'	13 ^h 30'	S 5
M 6	23 34 48	21 ^h 47'50"	17 ^h 53'	9 ^h 2'	25 ^h 3'	8 ^h 33'	15 ^h 21'	27 ^h 27'	28 ^h 31'	17 ^h 1'	27 ^h 56'	14 ^h D23	15 ^h 44'	29 ^h 11'	13 ^h 29'	M 6
T 7	23 38 44	22 ^h 46'38"	2 ^h 47'12"	10 ^h 48'	26 ^h 18'	9 ^h 10'	15 ^h 33'	27 ^h 33'	28 ^h 32'	17 ^h 3'	27 ^h 57'	14 ^h 23'	15 ^h 40'	29 ^h 17'	13 ^h 27'	T 7
W 8	23 42 41	23 ^h 45'27"	16 ^h 13'	12 ^h 35'	27 ^h 33'	9 ^h 47'	15 ^h 45'	27 ^h 38'	28 ^h 33'	17 ^h 5'	27 ^h 58'	14 ^h 24'	15 ^h 37'	29 ^h 24'	13 ^h 25'	W 8
T 9	23 46 38	24 ^h 44'18"	29 ^h 54'	14 ^h 24'	28 ^h 48'	10 ^h 24'	15 ^h 57'	27 ^h 43'	28 ^h 34'	17 ^h 8'	27 ^h 59'	14 ^h R24	15 ^h 34'	29 ^h 31'	13 ^h 23'	T 9
F 10	23 50 34	25 ^h 43'10"	13 ^h 31'18"	16 ^h 13'	0 ^h 2'	11 ^h 1'	16 ^h 8'	27 ^h 49'	28 ^h 35'	17 ^h 10'	28 ^h 0'	14 ^h 23'	15 ^h 31'	29 ^h 37'	13 ^h 22'	F 10
S 11	23 54 31	26 ^h 42'04"	26 ^h 25'	18 ^h 2'	1 ^h 17'	11 ^h 38'	16 ^h 20'	27 ^h 54'	28 ^h 36'	17 ^h 12'	28 ^h 1'	14 ^h 19'	15 ^h 28'	29 ^h 44'	13 ^h 20'	S 11
S 12	23 58 27	27 ^h 41'00"	9 ^h 41'17"	19 ^h 51'	2 ^h 32'	12 ^h 15'	16 ^h 31'	27 ^h 59'	28 ^h 37'	17 ^h 14'	28 ^h 2'	14 ^h 14'	15 ^h 25'	29 ^h 51'	13 ^h 18'	S 12
M13	0 2 24	28 ^h 39'58"	21 ^h 56'	21 ^h 40'	3 ^h 47'	12 ^h 51'	16 ^h 42'	28 ^h 4'	28 ^h 37'	17 ^h 17'	28 ^h 3'	14 ^h 6'	15 ^h 21'	29 ^h 57'	13 ^h 16'	M13
T 14	0 6 20	29 ^h 38'58"	4 ^h 41'23"	23 ^h 29'	5 ^h 2'	13 ^h 28'	16 ^h 54'	28 ^h 9'	28 ^h 38'	17 ^h 19'	28 ^h 4'	13 ^h 58'	15 ^h 18'	0 ^h 4'	13 ^h 14'	T 14
W15	0 10 17	0 ^h 38'00"	16 ^h 40'	25 ^h 18'	6 ^h 17'	14 ^h 5'	17 ^h 5'	28 ^h 14'	28 ^h 39'	17 ^h 21'	28 ^h 5'	13 ^h 50'	15 ^h 15'	0 ^h 11'	13 ^h 12'	W15
T 16	0 14 13	1 ^h 37'03"	28 ^h 47'	27 ^h 6'	7 ^h 32'	14 ^h 41'	17 ^h 16'	28 ^h 19'	28 ^h 39'	17 ^h 23'	28 ^h 6'	13 ^h 43'	15 ^h 12'	0 ^h 17'	13 ^h 10'	T 16
F 17	0 18 10	2 ^h 36'09"	10 ^h 46'	28 ^h 53'	8 ^h 46'	15 ^h 18'	17 ^h 27'	28 ^h 24'	28 ^h 40'	17 ^h 25'	28 ^h 7'	13 ^h 37'	15 ^h 9'	0 ^h 24'	13 ^h 8'	F 17
S 18	0 22 6	3 ^h 35'16"	22 ^h 39'	0 ^h 40'	10 ^h 1'	15 ^h 54'	17 ^h 38'	28 ^h 29'	28 ^h 40'	17 ^h 27'	28 ^h 8'	13 ^h 32'	15 ^h 5'	0 ^h 30'	13 ^h 5'	S 18
S 19	0 26 3	4 ^h 34'26"	4 ^h 27'	2 ^h 27'	11 ^h 16'	16 ^h 31'	17 ^h 49'	28 ^h 33'	28 ^h 40'	17 ^h 30'	28 ^h 9'	13 ^h 30'	15 ^h 2'	0 ^h 37'	13 ^h 3'	S 19
M20	0 30 0	5 ^h 33'38"	16 ^h 13'	4 ^h 12'	12 ^h 31'	17 ^h 7'	18 ^h 0'	28 ^h 38'	28 ^h 41'	17 ^h 32'	28 ^h 9'	13 ^h D30	14 ^h 59'	0 ^h 44'	13 ^h 1'	M20
T 21	0 33 56	6 ^h 32'53"	28 ^h 1'	5 ^h 57'	13 ^h 46'	17 ^h 43'	18 ^h 10'	28 ^h 42'	28 ^h 41'	17 ^h 34'	28 ^h 10'	13 ^h 31'	14 ^h 56'	0 ^h 50'	12 ^h 58'	T 21
W22	0 37 53	7 ^h 32'09"	9 ^h 41'55"	7 ^h 41'	15 ^h 1'	18 ^h 20'	18 ^h 21'	28 ^h 47'	28 ^h 41'	17 ^h 36'	28 ^h 11'	13 ^h 32'	14 ^h 53'	0 ^h 57'	12 ^h 56'	W22
T 23	0 41 49	8 ^h 31'28"	21 ^h 59'	9 ^h 25'	16 ^h 16'	18 ^h 56'	18 ^h 31'	28 ^h 51'	28 ^h 41'	17 ^h 38'	28 ^h 12'	13 ^h 34'	14 ^h 50'	1 ^h 4'	12 ^h 54'	T 23
F 24	0 45 46	9 ^h 30'50"	4 ^h 58'	11 ^h 7'	17 ^h 31'	19 ^h 32'	18 ^h 42'	28 ^h 55'	28 ^h 42'	17 ^h 40'	28 ^h 12'	13 ^h R35	14 ^h 46'	1 ^h 10'	12 ^h 51'	F 24
S 25	0 49 42	10 ^h 30'14"	16 ^h 57'	12 ^h 49'	18 ^h 46'	20 ^h 8'	18 ^h 52'	28 ^h 59'	28 ^h 42'	17 ^h 42'	28 ^h 13'	13 ^h 35'	14 ^h 43'	1 ^h 17'	12 ^h 49'	S 25
S 26	0 53 39	11 ^h 29'40"	29 ^h 59'	14 ^h 31'	20 ^h 1'	20 ^h 44'	19 ^h 3'	29 ^h 3'	28 ^h R42	17 ^h 44'	28 ^h 14'	13 ^h 34'	14 ^h 40'	1 ^h 24'	12 ^h 46'	S 26
M27	0 57 35	12 ^h 29'08"	13 ^h 42'29"	16 ^h 11'	21 ^h 15'	21 ^h 20'	19 ^h 13'	29 ^h 7'	28 ^h 42'	17 ^h 46'	28 ^h 14'	13 ^h 31'	14 ^h 37'	1 ^h 30'	12 ^h 44'	M27
T 28	1 1 32	13 ^h 28'39"	27 ^h 27'	17 ^h 51'	22 ^h 30'	21 ^h 56'	19 ^h 23'	29 ^h 11'	28 ^h 41'	17 ^h 49'	28 ^h 15'	13 ^h 27'	14 ^h 34'	1 ^h 37'	12 ^h 41'	T 28
W29	1 5 29	14 ^h 28'12"	11 ^h 53'	19 ^h 30'	23 ^h 45'	22 ^h 32'	19 ^h 33'	29 ^h 15'	28 ^h 41'	17 ^h 51'	28 ^h 16'	13 ^h 23'	14 ^h 31'	1 ^h 44'	12 ^h 38'	W29
T 30	1 9 25	15 ^h 27'47"	26 ^h 42'	21 ^h 9'	25 ^h 0'	23 ^h 48'	19 ^h 43'	29 ^h 18'	28 ^h 41'	17 ^h 53'	28 ^h 16'	13 ^h B18	14 ^h B27	1 ^h 50'	12 ^h B36	T 30

Delta T = 06m37s

Julian Calendar 1 Sept. 1445 == Greg. Calendar 10 Sept. 1445

OCTOBER 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	1 13 22	16 ^h 27'24"	11 ^h 47'	22 ^h 46'	26 ^h 15'	23 ^h 44'	19 ^h 53'	29 ^h 22'	28 ^h R41	17 ^h 55'	28 ^h 17'	13 ^h R15	14 ^h B24	1 ^h 57'	12 ^h R33	F 1
S 2	1 17 18	17 ^h 27'03"	26 ^h 58'	24 ^h 24'	27 ^h 30'	24 ^h 19'	20 ^h 2'	29 ^h 25'	28 ^h 41'	17 ^h 57'	28 ^h 17'	13 ^h B13	14 ^h 21'	2 ^h 4'	12 ^h B30	S 2
S 3	1 21 15	18 ^h 26'45"	12 ^h 47'	26 ^h 0'	28 ^h 45'	24 ^h 55'	20 ^h 12'	29 ^h 29'	28 ^h 40'	17 ^h 59'	28 ^h 18'	13 ^h D12	14 ^h 18'	2 ^h 10'	12 ^h 27'	S 3
M 4	1 25 11	19 ^h 26'28"	27 ^h 3'	27 ^h 36'	0 ^h 0'	25 ^h 31'	20 ^h 21'	29 ^h 32'	28 ^h 40'	18 ^h 1'	28 ^h 18'	13 ^h 13'	14 ^h 15'	2 ^h 17'	12 ^h 24'	M 4
T 5	1 29 8	20 ^h 26'13"	11 ^h 41'	29 ^h 11'	1 ^h 15'	26 ^h 6'	20 ^h 31'	29 ^h 35'	28 ^h 39'	18 ^h 3'	28 ^h 19'	13 ^h 14'	14 ^h 11'	2 ^h 23'	12 ^h 21'	T 5
W 6	1 33 4	21 ^h 26'00"	25 ^h 56'	0 ^h 46'	2 ^h 30'	26 ^h 42'	20 ^h 40'	29 ^h 38'	28 ^h 39'	18 ^h 5'	28 ^h 19'	13 ^h 15'	14 ^h 8'	2 ^h 30'	12 ^h 19'	W 6
T 7	1 37 1	22 ^h 25'49"	9 ^h 34'	2 ^h 20'	3 ^h 45'	27 ^h 17'	20 ^h 49'	29 ^h 41'	28 ^h 38'	18 ^h 6'	28 ^h 19'	13 ^h 17'	14 ^h 5'	2 ^h 37'	12 ^h 16'	T 7
F 8	1 40 58	23 ^h 25'39"	23 ^h 11'	3 ^h 54'	5 ^h 0'	27 ^h 52'	20 ^h 58'	29 ^h 44'	28 ^h 38'	18 ^h 8'	28 ^h 20'	13 ^h R17	14 ^h 2'	2 ^h 43'	12 ^h 13'	F 8
S 9	1 44 54	24 ^h 25'31"	6 ^h 41'	5 ^h 27'	6 ^h 15'	28 ^h 27'	21 ^h 7'	29 ^h 47'	28 ^h 37'	18 ^h 10'	28 ^h 20'	13 ^h 17'	13 ^h 59'	2 ^h 50'	12 ^h 10'	S 9
S 10	1 48 51	25 ^h 25'25"	18 ^h 58'	7 ^h 0'	7 ^h 30'	29 ^h 3'	21 ^h 16'	29 ^h 49'	28 ^h 36'	18 ^h 12'	28 ^h 20'	13 ^h 15'	13 ^h 56'	2 ^h 57'	12 ^h 7'	S 10
M11	1 52 47	26 ^h 25'20"	1 ^h 42'26"	8 ^h 32'	8 ^h 45'	29 ^h 38'	21 ^h 25'	29 ^h 52'	28 ^h 35'	18 ^h 14'	28 ^h 21'	13 ^h 13'	13 ^h 52'	3 ^h 3'	12 ^h 4'	M11
T 12	1 56 44	27 ^h 25'17"	13 ^h 41'	10 ^h 3'	10 ^h 0'	0 ^h 41'13"	21 ^h 33'	29 ^h 54'	28 ^h 35'	18 ^h 16'	28 ^h 21'	13 ^h 11'	13 ^h 49'	3 ^h 10'	12 ^h 1'	T 12
W13	2 0 40	28 ^h 25'15"	25 ^h 45'	11 ^h 34'	11 ^h 15'	0 ^h 48'	21 ^h 42'	29 ^h 57'	28 ^h 34'	18 ^h 18'	28 ^h 21'	13 ^h 8'	13 ^h 46'	3 ^h 17'	11 ^h 58'	W13
T 14	2 4 37	29 ^h 25'16"	7 ^h 42'	13 ^h 5'	12 ^h 30'	1 ^h 23'	21 ^h 50'	29 ^h 59'	28 ^h 33'	18 ^h 19'	28 ^h 21'	13 ^h 6'	13 ^h 43'	3 ^h 23'	11 ^h 55'	T 14
F 15	2 8 33	0 ^h 42'51"	19 ^h 34'	14 ^h 35'	13 ^h 45'	1 ^h 57'	21 ^h 58'	0 ^h 48'	28 ^h 32'	18 ^h 21'	28 ^h 22'	13 ^h 5'	13 ^h 40'	3 ^h 30'	11 ^h 51'	F 15
S 16	2 12 30	1 ^h 25'22"	1 ^h 23'	16 ^h 4'	15 ^h 0'	2 ^h 32'	22 ^h 6'	0 ^h 3'	28 ^h 31'	18 ^h 23'	28 ^h 22'	13 ^h 4'	13 ^h 36'	3 ^h 37'	11 ^h 48'	S 16
S 17	2 16 27	2 ^h 25'28"	13 ^h 10'	17 ^h 34'	16 ^h 15'	3 ^h 7'	22 ^h 14'	0 ^h 5'	28 ^h 30'	18 ^h 25'	28 ^h 22'	13 ^h D 3	13 ^h 33'	3 ^h 43'	11 ^h 45'	S 17
M18	2 20 23	3 ^h 25'36"	24 ^h 59'	19 ^h 2'	17 ^h 30'	3 ^h 41'	22 ^h 22'	0 ^h 7'	28 ^h 29'	18 ^h 26'	28 ^h 22'	13 ^h 4'	13 ^h 30'	3 ^h 50'	11 ^h 42'	M18
T 19	2 24 20	4 ^h 25'46"	6 ^h 11'52"	20 ^h 30'	18 ^h 45'	4 ^h 16'	22 ^h 30'	0 ^h 9'	28 ^h 27'	18 ^h 28'	28 ^h 22'	13 ^h 4'	13 ^h 27'	3 ^h 57'	11 ^h 39'	T 19
W20	2 28 16	5 ^h 25'58"	18 ^h 51'	21 ^h 58'	20 ^h 0'	4 ^h 50'	22 ^h 37'	0 ^h 10'	28 ^h 26'	18 ^h 30'	28 ^h 22'	13 ^h 5'	13 ^h 24'	4 ^h 3'	11 ^h 36'	W20
T 21	2 32 13	6 ^h 26'12"	0 ^h 59'59"	23 ^h 25'	21 ^h 15'	5 ^h 25'	22 ^h 44'	0 ^h 12'	28 ^h 25'	18 ^h 31'	28 ^h R22	13 ^h 6'	13 ^h 21'	4 ^h 10'	11 ^h 33'	T 21
F 22	2 36 9	7 ^h 26'28"	13 ^h 20'	24 ^h 51'	22 ^h 30'	5 ^h 59'	22 ^h 52'	0 ^h 13'	28 ^h 24'	18 ^h 33'	28 ^h 22'	13 ^h 7'	13 ^h 17'	4 ^h 16'	11 ^h 29'	F 22
S 23	2 40 6	8 ^h 26'46"	25 ^h 58'	26 ^h 17'	23 ^h 45'	6 ^h 33'	22 ^h 59'	0 ^h 14'	28 ^h 22'	18 ^h 35'	28 ^h 22'	13 ^h 7'	13 ^h 14'	4 ^h 23'	11 ^h 26'	S 23
S 24	2 44 2	9 ^h 27'06"	8 ^h 15'56"	27 ^h 42'	24 ^h 59'	7 ^h 4'	23 ^h 6'	0 ^h 15'	28 ^h 21'	18 ^h 36'	28 ^h 22'	13 ^h R 7	13 ^h 11'	4 ^h 30'	11 ^h 23'	S 24
M25	2 47 59	10 ^h 27'28"	22 ^h 16'	29 ^h 6'	26 ^h 14'	7 ^h 41'	23 ^h 13'	0 ^h 17'	28 ^h 19'	18 ^h 38'	28 ^h 22'	13 ^h 7'	13 ^h 8'	4 ^h 36'	11 ^h 20'	M25
T 26	2 51 56	11 ^h 27'51"	6 ^h 47' 4"	0 ^h 47'30"	27 ^h 29'	8 ^h 15'	23 ^h 19'	0 ^h 17'	28 ^h 18'	18 ^h 39'	28 ^h 22'	13 ^h 7'	13 ^h 5'	4 ^h 43'	11 ^h 17'	T 26
W27	2 55 52	12 ^h 28'17"	20 ^h 16'	1 ^h 52'	28 ^h 44'	8 ^h 49'	23 ^h 26'	0 ^h 18'	28 ^h 16'	18 ^h 41'	28 ^h 22'	13 ^h 7'	13 ^h 2'	4 ^h 50'	11 ^h 13'	W27
T 28	2 59 49	13 ^h 28'45"	4 ^h 53'53"	3 ^h 14'	29 ^h 59'	9 ^h 23'	23 ^h 32'	0 ^h 19'	28 ^h 15'	18 ^h 42'	28 ^h 21'	13 ^h D 7	12 ^h 58'	4 ^h 56'	11 ^h 10'	T 28
F 29	3 3 45	14 ^h 29'14"	19 ^h 49'	4 ^h 35'	1 ^h 47'14"	9 ^h 57'	23 ^h 39'	0 ^h 20'	28 ^h 13'	18 ^h 44'	28 ^h 21'	13 ^h 7'	12 ^h 55'	5 ^h 3'	11 ^h 7'	F 29
S 30	3 7 42	15 ^h 29'46"	4 ^h 41'58"	5 ^h 54'	2 ^h 29'	10 ^h 30'	23 ^h 45'	0 ^h 20'	28 ^h 12'	18 ^h 45'	28 ^h 21'	13 ^h 7'	12 ^h 52'	5 ^h 10'	11 ^h 4'	S 30
S 31	3 11 38	16 ^h 30'19"	20 ^h 41'10"	7 ^h 47'12"	3 ^h 47'44"	11 ^h 47' 4"	23 ^h 51'	0 ^h 20'20"	28 ^h 11'10"	18 ^h 46'	28 ^h 21'	13 ^h R 7	12 ^h 49'	5 ^h 16'	11 ^h 1'	S 31

ASTRODIENST EPHEMERIS for the year 1445

geocentric

NOVEMBER 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	3 15 35	17♏30'54	5♏16	8♏29	4♏59	11♏37	23♏56	0♏21	28°R 8	18♏48	28°R21	13°R 7	12♏46	5♏23	10°R57	M 1
T 2	3 19 31	18°31'30	20° 7	9°44	6°14	12°11	24° 2	0°21	28II 6	18°49	28♏20	13♏ 6	12°42	5°30	10♏54	T 2
W 3	3 23 28	19°32'07	4♏36	10°57	7°29	12°44	24° 8	0°R21	28° 5	18°50	28°20	13° 5	12°39	5°36	10°51	W 3
T 4	3 27 25	20°32'46	18°39	12° 8	8°44	13°17	24°13	0°21	28° 3	18°52	28°20	13° 5	12°36	5°43	10°48	T 4
F 5	3 31 21	21°33'26	2♏14	13°16	9°59	13°50	24°18	0°20	28° 1	18°53	28°19	13° 4	12°33	5°50	10°45	F 5
S 6	3 35 18	22°34'07	15°23	14°22	11°14	14°23	24°23	0°20	27°59	18°54	28°19	13° 3	12°30	5°56	10°42	S 6
S 7	3 39 14	23°34'49	28° 8	15°25	12°29	14°56	24°28	0°20	27°57	18°55	28°18	13°D 3	12°27	6° 3	10°39	S 7
M 8	3 43 11	24°35'32	10♏33	16°23	13°44	15°29	24°32	0°19	27°55	18°57	28°18	13° 4	12°23	6° 9	10°36	M 8
T 9	3 47 7	25°36'16	22°42	17°18	14°59	16° 1	24°37	0°19	27°53	18°58	28°17	13° 5	12°20	6°16	10°32	T 9
W10	3 51 4	26°37'02	4♏40	18° 8	16°14	16°34	24°41	0°18	27°51	18°59	28°17	13° 6	12°17	6°23	10°29	W10
T11	3 55 0	27°37'48	16°31	18°53	17°28	17° 6	24°45	0°17	27°49	19° 0	28°16	13° 7	12°14	6°29	10°26	T11
F12	3 58 57	28°38'36	28°18	19°32	18°43	17°38	24°49	0°16	27°46	19° 1	28°16	13° 9	12°11	6°36	10°23	F12
S13	4 2 54	29°39'24	10♏ 6	20° 4	19°58	18°11	24°53	0°15	27°44	19° 2	28°15	13°R 9	12° 8	6°43	10°20	S13
S14	4 6 50	0♏40'14	21°56	20°28	21°13	18°43	24°57	0°14	27°42	19° 3	28°15	13° 9	12° 4	6°49	10°17	S14
M15	4 10 47	1°41'05	3II51	20°44	22°28	19°15	25° 0	0°12	27°40	19° 4	28°14	13° 8	12° 1	6°56	10°15	M15
T16	4 14 43	2°41'57	15°53	20°R51	23°43	19°46	25° 3	0°11	27°38	19° 5	28°13	13° 6	11°58	7° 3	10°12	T16
W17	4 18 40	3°42'50	28° 3	20°48	24°58	20°18	25° 6	0° 9	27°35	19° 6	28°13	13° 2	11°55	7° 9	10° 9	W17
T18	4 22 36	4°43'45	10♏24	20°34	26°13	20°50	25° 9	0° 8	27°33	19° 7	28°12	12°59	11°52	7°16	10° 6	T18
F19	4 26 33	5°44'41	22°56	20° 9	27°27	21°21	25°12	0° 6	27°31	19° 7	28°11	12°55	11°48	7°23	10° 3	F19
S20	4 30 30	6°45'37	5♏42	19°33	28°42	21°53	25°14	0° 4	27°28	19° 8	28°11	12°52	11°45	7°29	10° 0	S20
S21	4 34 26	7°46'35	18°43	18°45	29°57	22°24	25°17	0° 2	27°26	19° 9	28°10	12°49	11°42	7°36	9°58	S21
M22	4 38 23	8°47'35	2♏ 1	17°47	1♏12	22°55	25°19	29♏59	27°24	19°10	28° 9	12°48	11°39	7°43	9°55	M22
T23	4 42 19	9°48'35	15°38	16°40	2°27	23°26	25°21	29°58	27°21	19°10	28° 8	12°D48	11°36	7°49	9°52	T23
W24	4 46 16	10°49'37	29°35	15°26	3°41	23°57	25°23	29°56	27°19	19°11	28° 7	12°49	11°33	7°56	9°50	W24
T25	4 50 12	11°50'39	13♏52	14° 6	4°56	24°27	25°24	29°53	27°16	19°12	28° 6	12°51	11°29	8° 2	9°47	T25
F26	4 54 9	12°51'43	28°27	12°43	6°11	24°58	25°25	29°51	27°14	19°12	28° 6	12°52	11°26	8° 9	9°44	F26
S27	4 58 5	13°52'48	13♏16	11°20	7°26	25°28	25°27	29°48	27°11	19°13	28° 5	12°R53	11°23	8°16	9°42	S27
S28	5 2 2	14°53'54	28°13	10° 1	8°41	25°58	25°28	29°45	27° 9	19°13	28° 4	12°52	11°20	8°22	9°39	S28
M29	5 5 59	15°55'01	13♏10	8°46	9°55	26°29	25°28	29°43	27° 6	19°14	28° 3	12°49	11°17	8°29	9°37	M29
T30	5 9 55	16♏56'08	28♏ 0	7♏40	11♏10	26♏59	25♏29	29♏40	27II 4	19♏14	28♏ 2	12♏45	11♏14	8♏36	9♏35	T30

Delta T = 06m37s

Julian Calendar 1 Nov. 1445 == Greg. Calendar 10 Nov. 1445

DECEMBER 1445 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	5 13 52	17♏57'16	12♏32	6°R42	12♏25	27♏28	25♏29	29°R37	27°R 1	19♏15	28°R 1	12°R40	11♏10	8♏42	9°R32	W 1
T 2	5 17 48	18°58'24	26°42	5♏55	13°40	27°58	25°30	29♏34	26II59	19°15	28♏ 0	12♏34	11° 7	8°49	9♏30	T 2
F 3	5 21 45	19°59'33	10♏26	5°18	14°54	28°27	25°R30	29°31	26°56	19°15	27°59	12°28	11° 4	8°56	9°28	F 3
S 4	5 25 41	21° 0'42	23°42	4°53	16° 9	28°57	25°29	29°27	26°54	19°16	27°58	12°23	11° 1	9° 2	9°26	S 4
S 5	5 29 38	22° 1'51	6♏32	4°38	17°24	29°26	25°29	29°24	26°51	19°16	27°57	12°20	10°58	9° 9	9°23	S 5
M 6	5 33 34	23° 3'00	19° 0	4°D34	18°38	29°55	25°28	29°21	26°49	19°16	27°56	12°D19	10°54	9°16	9°21	M 6
T 7	5 37 31	24° 4'09	1°Y10	4°39	19°53	0♏23	25°28	29°17	26°46	19°16	27°55	12°19	10°51	9°22	9°19	T 7
W 8	5 41 28	25° 5'19	13° 7	4°53	21° 8	0°52	25°27	29°14	26°43	19°17	27°54	12°20	10°48	9°29	9°17	W 8
T 9	5 45 24	26° 6'28	24°56	5°15	22°22	1°20	25°25	29°10	26°41	19°17	27°53	12°22	10°45	9°35	9°15	T 9
F10	5 49 21	27° 7'37	6♏42	5°44	23°37	1°48	25°24	29° 6	26°38	19°17	27°51	12°R23	10°42	9°42	9°13	F10
S11	5 53 17	28° 8'47	18°31	6°20	24°51	2°16	25°23	29° 2	26°36	19°17	27°50	12°23	10°39	9°49	9°12	S11
S12	5 57 14	29° 9'57	0II25	7° 2	26° 6	2°44	25°21	28°59	26°33	19°17	27°49	12°21	10°35	9°55	9°10	S12
M13	6 1 10	0♏11'06	12°28	7°49	27°20	3°12	25°19	28°55	26°31	19°R17	27°48	12°17	10°32	10° 2	9° 8	M13
T14	6 5 7	1°12'16	24°42	8°41	28°35	3°39	25°17	28°51	26°28	19°17	27°47	12°10	10°29	10° 9	9° 7	T14
W15	6 9 3	2°13'26	7♏ 8	9°37	29°49	4° 7	25°14	28°47	26°25	19°17	27°46	12° 2	10°26	10°15	9° 5	W15
T16	6 13 0	3°14'36	19°47	10°37	1♏ 4	4°34	25°12	28°42	26°23	19°17	27°44	11°52	10°23	10°22	9° 3	T16
F17	6 16 57	4°15'46	2♏39	11°40	2°18	5° 0	25° 9	28°38	26°20	19°17	27°43	11°42	10°20	10°29	9° 2	F17
S18	6 20 53	5°16'56	15°43	12°46	3°32	5°27	25° 6	28°34	26°18	19°16	27°42	11°33	10°16	10°35	9° 0	S18
S19	6 24 50	6°18'06	28°59	13°54	4°47	5°53	25° 3	28°30	26°15	19°16	27°41	11°26	10°13	10°42	8°59	S19
M20	6 28 46	7°19'16	12♏26	15° 5	6° 1	6°19	25° 0	28°25	26°13	19°16	27°39	11°20	10°10	10°49	8°58	M20
T21	6 32 43	8°20'27	26° 5	16°17	7°15	6°45	24°56	28°21	26°10	19°16	27°38	11°17	10° 7	10°55	8°57	T21
W22	6 36 39	9°21'37	9♏55	17°32	8°30	7°11	24°53	28°16	26° 8	19°15	27°37	11°D17	10° 4	11° 2	8°55	W22
T23	6 40 36	10°22'48	23°58	18°48	9°44	7°36	24°49	28°12	26° 5	19°15	27°36	11°17	10° 0	11° 9	8°54	T23
F24	6 44 32	11°23'58	8♏12	20° 6	10°58	8° 1	24°45	28° 7	26° 3	19°15	27°34	11°R18	9°57	11°15	8°53	F24
S25	6 48 29	12°25'09	22°36	21°25	12°12	8°26	24°41	28° 3	26° 0	19°14	27°33	11°17	9°54	11°22	8°52	S25
S26	6 52 26	13°26'20	7♏ 7	22°45	13°27	8°51	24°37	27°58	25°58	19°14	27°32	11°15	9°51	11°28	8°51	S26
M27	6 56 22	14°27'30	21°41	24° 7	14°41	9°15	24°32	27°53	25°55	19°13	27°30	11° 9	9°48	11°35	8°50	M27
T28	7 0 19	15°28'41	6♏11	25°29	15°55	9°39	24°27	27°48	25°53	19°13	27°29	11° 1	9°45	11°42	8°50	T28
W29	7 4 15	16°29'50	20°30	26°52	17° 9	10° 3	24°23	27°44	25°51	19°12	27°28	10°51	9°41	11°48	8°49	W29
T30	7 8 12	17°31'00	4♏33	28°17	18°23	10°27	24°17	27°39	25°48	19°12	27°26	10°40	9°38	11°55	8°48	T30
F31	7 12 8	18♏32'08	18♏14	29♏42	19♏37	10♏50	24♏12	27♏34	25II46	19♏11	27♏25	10♏28	9♏35	12♏ 2	8♏48	F31

Delta T = 06m37s

Julian Calendar