



Astrodienst Ephemeris Tables for the year 1447

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 1447

geocentric

JANUARY 1447 JC

00:00 UT

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

Delta T = 06m35s

Julian Calendar 1 Jan. 1447 == Greg. Calendar 10 Jan. 1447

FEBRUARY 1447 JC

00:00 UT

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

Delta T = 06m35s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1447
geocentric

MARCH 1447 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	11 7 45	18°48'40	27°45	12°R59	8°X56	12°Y33	21°R 9	8°R 6	29°II 6	20°R 9	27°R43	15°R42	17°Y 5	29°II19	15°R 4	W 1
T 2	11 11 41	19°48'18	10°35	12°X 6	10°11	13°18	21°R 1	8°R 3	29° 6	20°R 7	27°R42	15°Y38	17° 2	29°26	15° 7	T 2
F 3	11 15 38	20°47'53	23°40	11°16	11°26	14° 3	20°54	8° 0	29° 6	20° 5	27°41	15°36	16°58	29°33	15°10	F 3
S 4	11 19 34	21°47'27	7° 0	10°31	12°40	14°48	20°46	7°57	29° 6	20° 4	27°41	15°34	16°55	29°39	15°13	S 4
S 5	11 23 31	22°46'59	20°32	9°50	13°55	15°32	20°38	7°54	29° 6	20° 2	27°40	15°D34	16°52	29°46	15°16	S 5
M 6	11 27 28	23°46'28	4°16	9°15	15° 9	16°17	20°30	7°51	29° 7	20° 0	27°39	15°35	16°49	29°53	15°19	M 6
T 7	11 31 24	24°45'56	18°10	8°45	16°24	17° 1	20°22	7°49	29° 7	19°59	27°39	15°36	16°46	29°59	15°22	T 7
W 8	11 35 21	25°45'22	2°11	8°21	17°38	17°46	20°15	7°46	29° 8	19°57	27°38	15°38	16°43	0° 6	15°26	W 8
T 9	11 39 17	26°44'47	16°18	8° 3	18°53	18°30	20° 7	7°44	29° 8	19°56	27°37	15°39	16°39	0°13	15°29	T 9
F 10	11 43 14	27°44'09	0°30	7°52	20° 7	19°15	19°59	7°42	29° 9	19°54	27°37	15°R39	16°36	0°20	15°32	F 10
S 11	11 47 10	28°43'30	14°43	7°46	21°22	19°59	19°52	7°39	29° 9	19°52	27°36	15°38	16°33	0°26	15°35	S 11
S 12	11 51 7	29°42'50	28°56	7°D46	22°36	20°44	19°44	7°37	29°10	19°51	27°36	15°37	16°30	0°33	15°39	S 12
M13	11 55 3	0°Y42'07	13° 6	7°51	23°51	21°28	19°37	7°35	29°11	19°49	27°35	15°35	16°27	0°40	15°42	M13
T 14	11 59 0	1°41'22	27° 8	8° 2	25° 5	22°12	19°29	7°34	29°12	19°47	27°35	15°33	16°24	0°47	15°46	T 14
W15	12 2 57	2°40'36	11°X 1	8°18	26°20	22°56	19°22	7°32	29°12	19°46	27°34	15°32	16°20	0°53	15°49	W15
T 16	12 6 53	3°39'47	24°40	8°39	27°34	23°41	19°14	7°30	29°13	19°44	27°34	15°30	16°17	1° 0	15°53	T 16
F 17	12 10 50	4°38'57	8°Y 4	9° 5	28°48	24°25	19° 7	7°29	29°14	19°43	27°33	15°30	16°14	1° 7	15°56	F 17
S 18	12 14 46	5°38'04	21°10	9°35	0°Y 3	25° 9	19° 0	7°27	29°15	19°41	27°33	15°D30	16°11	1°13	16° 0	S 18
S 19	12 18 43	6°37'09	3°X58	10°10	1°17	25°53	18°53	7°26	29°16	19°39	27°33	15°30	16° 8	1°20	16° 4	S 19
M20	12 22 39	7°36'12	16°30	10°48	2°32	26°37	18°46	7°24	29°17	19°38	27°32	15°31	16° 4	1°27	16° 7	M20
T 21	12 26 36	8°35'13	28°47	11°30	3°46	27°21	18°39	7°23	29°18	19°36	27°32	15°32	16° 1	1°34	16°11	T 21
W22	12 30 32	9°34'12	10°II52	12°16	5° 0	28° 4	18°32	7°22	29°20	19°35	27°32	15°32	15°58	1°40	16°15	W22
T 23	12 34 29	10°33'08	22°49	13° 6	6°15	28°48	18°25	7°21	29°21	19°33	27°31	15°33	15°55	1°47	16°19	T 23
F 24	12 38 25	11°32'02	4°X42	13°58	7°29	29°32	18°18	7°21	29°22	19°32	27°31	15°33	15°52	1°54	16°23	F 24
S 25	12 42 22	12°30'54	16°36	14°54	8°43	0°X16	18°12	7°20	29°23	19°30	27°31	15°R33	15°49	2° 0	16°26	S 25
S 26	12 46 19	13°29'44	28°35	15°52	9°58	0°59	18° 5	7°19	29°25	19°29	27°31	15°33	15°45	2° 7	16°30	S 26
M27	12 50 15	14°28'31	10°II44	16°54	11°12	1°43	17°59	7°19	29°26	19°27	27°31	15°33	15°42	2°14	16°34	M27
T 28	12 54 12	15°27'16	23° 6	17°58	12°26	2°27	17°53	7°18	29°28	19°26	27°31	15°D33	15°39	2°21	16°38	T 28
W29	12 58 8	16°25'58	5°II46	19° 4	13°40	3°10	17°46	7°18	29°29	19°24	27°30	15°33	15°36	2°27	16°42	W29
T 30	13 2 5	17°24'39	18°45	20°13	14°55	3°54	17°40	7°18	29°31	19°23	27°30	15°33	15°33	2°34	16°46	T 30
F 31	13 6 1	18°Y23'17	2° 5	21°X25	16°Y 9	4°X37	17°R35	7°D18	29°II33	19°R21	27°R30	15°Y33	15°Y29	2°X41	16°X50	F 31

Delta T = 06m34s

Julian Calendar 1 March 1447 == Greg. Calendar 10 March 1447

APRIL 1447 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	13 9 58	19°Y21'53	15°X44	22°X39	17°Y23	5°X20	17°R29	7°R18	29°II34	19°R20	27°D30	15°R33	15°Y26	2°X47	16°X54	S 1
S 2	13 13 54	20°20'27	29°42	23°54	18°37	6° 4	17°R23	7°18	29°36	19°R19	27°R30	15°Y33	15°23	2°54	16°59	S 2
M 3	13 17 51	21°19'00	13°II54	25°12	19°51	6°47	17°18	7°18	29°38	19°17	27°30	15°33	15°20	3° 1	17° 3	M 3
T 4	13 21 48	22°17'30	28°16	26°33	21° 5	7°30	17°13	7°19	29°40	19°16	27°30	15°32	15°17	3° 8	17° 7	T 4
W 5	13 25 44	23°15'59	12°X43	27°55	22°20	8°13	17° 7	7°19	29°41	19°15	27°30	15°31	15°14	3°14	17°11	W 5
T 6	13 29 41	24°14'27	27° 9	29°19	23°34	8°56	17° 2	7°20	29°43	19°13	27°31	15°30	15°10	3°21	17°15	T 6
F 7	13 33 37	25°12'52	11°X31	0°Y45	24°48	9°39	16°58	7°20	29°45	19°12	27°31	15°30	15° 7	3°28	17°19	F 7
S 8	13 37 34	26°11'17	25°45	2°13	26° 2	10°22	16°53	7°21	29°47	19°11	27°31	15°D29	15° 4	3°35	17°24	S 8
S 9	13 41 30	27° 9'39	9°X49	3°43	27°16	11° 5	16°48	7°22	29°49	19°10	27°31	15°30	15° 1	3°41	17°28	S 9
M10	13 45 27	28° 8'00	23°40	5°14	28°30	11°48	16°44	7°23	29°51	19° 8	27°31	15°30	14°58	3°48	17°32	M10
T 11	13 49 23	29° 6'19	7°X19	6°48	29°44	12°31	16°40	7°24	29°54	19° 7	27°31	15°31	14°55	3°55	17°37	T 11
W12	13 53 20	0°X 4'37	20°45	8°23	0°X58	13°14	16°36	7°25	29°56	19° 6	27°32	15°32	14°51	4° 1	17°41	W12
T 13	13 57 17	1° 2'53	3°Y58	10° 1	2°12	13°57	16°32	7°27	29°58	19° 5	27°32	15°33	14°48	4° 8	17°45	T 13
F 14	14 1 13	2° 1'07	16°58	11°40	3°26	14°39	16°28	7°28	0°X 0	19° 4	27°32	15°R34	14°45	4°15	17°50	F 14
S 15	14 5 10	2°59'20	29°45	13°21	4°40	15°22	16°24	7°30	0° 2	19° 3	27°33	15°33	14°42	4°22	17°54	S 15
S 16	14 9 6	3°57'31	12°X19	15° 3	5°54	16° 5	16°21	7°31	0° 5	19° 2	27°33	15°32	14°39	4°28	17°58	S 16
M17	14 13 3	4°55'40	24°41	16°48	7° 8	16°47	16°18	7°33	0° 7	19° 0	27°33	15°29	14°35	4°35	18° 3	M17
T 18	14 16 59	5°53'48	6°II52	18°34	8°22	17°30	16°15	7°35	0°10	18°59	27°34	15°26	14°32	4°42	18° 7	T 18
W19	14 20 56	6°51'53	18°54	20°23	9°36	18°12	16°12	7°37	0°12	18°58	27°34	15°23	14°29	4°48	18°12	W19
T 20	14 24 52	7°49'57	0°X50	22°13	10°50	18°55	16° 9	7°39	0°14	18°57	27°35	15°19	14°26	4°55	18°16	T 20
F 21	14 28 49	8°47'59	12°43	24° 5	12° 4	19°37	16° 6	7°41	0°17	18°57	27°35	15°17	14°23	5° 2	18°20	F 21
S 22	14 32 46	9°45'59	24°36	25°58	13°18	20°20	16° 4	7°43	0°20	18°56	27°36	15°14	14°20	5° 9	18°25	S 22
S 23	14 36 42	10°43'57	6°R33	27°54	14°32	21° 2	16° 2	7°46	0°22	18°55	27°36	15°D14	14°16	5°15	18°29	S 23
M24	14 40 39	11°41'54	18°40	29°51	15°46	21°44	16° 0	7°48	0°25	18°54	27°37	15°14	14°13	5°22	18°34	M24
T 25	14 44 35	12°39'48	1°R 1	1°X51	17° 0	22°26	15°58	7°51	0°27	18°53	27°38	15°15	14°10	5°29	18°38	T 25
W26	14 48 32	13°37'41	13°40	3°52	18°14	23° 8	15°57	7°53	0°30	18°52	27°38	15°16	14° 7	5°36	18°43	W26
T 27	14 52 28	14°35'31	26°41	5°54	19°27	23°50	15°55	7°56	0°33	18°51	27°39	15°18	14° 4	5°42	18°47	T 27
F 28	14 56 25	15°33'20	10° 6	7°58	20°41	24°32	15°54	7°59	0°36	18°51	27°39	15°R19	14° 1	5°49	18°52	F 28
S 29	15 0 21	16°31'08	23°57	10° 4	21°55	25°14	15°53	8° 2	0°38	18°50	27°40	15°19	13°57	5°56	18°56	S 29
S 30	15 4 18	17°X28'53	8°II12	12°X11	23°X 9	25°X56	15°R52	8°R 5	0°X41	18°R49	27°R41	15°Y17	13°Y54	6°X 2	19°X 1	S 30

Delta T = 06m34s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1447

geocentric

MAY 1447 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	15 8 15	18°26'38	22°14'47	14°20'20	24°28'23	26°08'38	15°05'51	8°08'11	0°04'44	18°08'49	27°04'42	15°08'14	13°05'51	6°09'19	19°08'17	M 1
T 2	15 12 11	19°24'21	7°17'35	16°02'29	25°25'37	27°20'15	15°05'51	8°08'11	0°04'47	18°08'48	27°04'42	15°08'14	13°05'51	6°16'16	19°10'10	T 2
W 3	15 16 8	20°22'03	22°29'20	18°03'39	26°26'50	28°02'15	15°05'50	8°08'15	0°05'00	18°08'47	27°04'43	15°08'14	13°05'51	6°23'19	19°14'14	W 3
T 4	15 20 4	21°19'43	7°32'29	20°05'50	28°02'44	28°44'15	15°05'50	8°08'18	0°05'03	18°08'47	27°04'44	15°08'14	13°05'51	6°29'19	19°19'19	T 4
F 5	15 24 1	22°17'23	22°01'23	23°02'29	29°18'29	29°25'15	15°05'50	8°08'21	0°05'06	18°08'46	27°04'45	14°05'55	13°03'38	6°36'19	19°23'19	F 5
S 6	15 27 57	23°15'02	6°25'25	25°13'00	0°11'32	0°11'07	15°05'50	8°08'25	0°05'09	18°08'46	27°04'46	14°05'53	13°03'35	6°43'19	19°28'19	S 6
S 7	15 31 54	24°12'39	20°31'27	27°25'14	1°45'04	0°49'15	15°05'51	8°08'29	1°02'18	18°08'45	27°04'47	14°05'51	13°03'32	6°49'19	19°32'19	S 7
M 8	15 35 50	25°10'15	4°17'17	29°36'25	1°30'13	1°30'15	15°05'51	8°08'32	1°05'18	18°08'45	27°04'48	14°05'52	13°03'29	6°56'19	19°37'19	M 8
T 9	15 39 47	26°07'51	17°43'11	4°13'29	2°12'15	2°12'15	15°05'52	8°08'36	1°08'18	18°08'44	27°04'48	14°05'53	13°03'26	7°03'19	19°41'19	T 9
W10	15 43 44	27°05'25	0°17'51	3°56'25	2°53'15	2°53'15	15°05'53	8°08'40	1°11'11	18°08'44	27°04'49	14°05'54	13°03'22	7°10'19	19°46'19	W10
T 11	15 47 40	28°02'59	13°44'06	6°04'29	3°35'15	3°35'15	15°05'54	8°08'44	1°14'14	18°08'43	27°04'50	14°05'55	13°03'19	7°16'19	19°50'19	T 11
F 12	15 51 37	29°00'32	26°24'08	8°11'29	7°54'41	7°54'41	15°05'55	8°08'48	1°18'18	18°08'43	27°04'51	14°05'54	13°03'16	7°23'19	19°55'19	F 12
S 13	15 55 33	29°58'03	8°52'10	10°16'09	9°07'45	9°07'45	15°05'57	8°08'53	1°21'11	18°08'43	27°04'52	14°05'52	13°03'13	7°30'19	19°59'19	S 13
S 14	15 59 30	0°11'55	21°10'12	12°20'10	10°21'53	10°21'53	15°05'58	8°08'57	1°24'11	18°08'43	27°04'53	14°05'52	13°03'10	7°37'19	20°04'19	S 14
M15	16 3 26	1°53'04	3°11'21	14°21'11	11°35'20	11°35'20	16°00'09	9°01'12	1°27'11	18°08'42	27°04'54	14°05'52	13°03'07	7°43'19	20°08'19	M15
T 16	16 7 23	2°50'33	15°24'16	16°20'12	12°48'07	12°48'07	16°02'16	9°06'10	1°30'11	18°08'42	27°04'56	14°05'52	13°03'03	7°50'19	20°13'19	T 16
W17	16 11 19	3°48'00	27°21'18	18°17'14	14°02'29	14°02'29	16°04'16	9°10'10	1°34'11	18°08'42	27°04'57	14°05'53	13°03'00	7°57'19	20°17'19	W17
T 18	16 15 16	4°45'27	9°15'21	20°12'15	15°16'24	15°16'24	16°06'16	9°15'11	1°37'11	18°08'42	27°04'58	14°05'54	13°02'57	8°03'19	20°21'19	T 18
F 19	16 19 13	5°42'53	21°06'22	22°04'16	16°29'09	16°29'09	16°09'16	9°20'10	1°40'11	18°08'42	27°04'59	14°05'54	13°02'54	8°10'19	20°26'19	F 19
S 20	16 23 9	6°40'17	2°12'58	23°53'17	17°43'09	17°43'09	16°12'16	9°24'11	1°44'11	18°08'42	28°00'13	13°05'58	12°05'51	8°17'19	20°30'19	S 20
S 21	16 27 6	7°37'40	14°55'25	25°41'18	18°57'10	18°57'10	16°14'16	9°29'11	1°47'11	18°08'42	28°01'13	13°05'53	12°04'47	8°24'19	20°35'19	S 21
M22	16 31 2	8°35'02	27°00'27	27°25'20	20°10'11	20°10'11	16°17'16	9°34'11	1°50'11	18°08'42	28°02'13	13°05'51	12°04'44	8°30'19	20°39'19	M22
T 23	16 34 59	9°32'23	9°17'29	29°07'21	21°24'11	21°24'11	16°21'16	9°39'11	1°54'11	18°08'42	28°04'13	13°05'50	12°04'41	8°37'19	20°43'19	T 23
W24	16 38 55	10°29'43	21°52'09	22°37'23	22°37'23	22°37'23	16°24'16	9°44'11	1°57'11	18°08'42	28°05'13	13°05'50	12°03'38	8°44'19	20°48'19	W24
T 25	16 42 52	11°27'02	4°12'50	2°23'23	23°51'13	23°51'13	16°28'16	9°49'11	2°01'11	18°08'42	28°06'13	13°05'51	12°03'35	8°51'19	20°52'19	T 25
F 26	16 46 49	12°24'20	18°13'35	25°04'13	13°51'16	13°51'16	16°31'16	9°54'11	2°04'11	18°08'42	28°07'13	13°05'51	12°03'32	8°57'19	20°56'19	F 26
S 27	16 50 45	13°21'37	2°11'5	5°28'26	16°18'14	16°18'14	16°35'16	10°00'11	2°08'11	18°08'42	28°09'13	13°05'50	12°02'28	9°04'19	21°01'19	S 27
S 28	16 54 42	14°18'53	16°24'06	6°56'27	27°31'15	27°31'15	16°39'16	10°05'11	2°11'11	18°08'42	28°10'13	13°04'46	12°02'25	9°11'19	21°05'19	S 28
M29	16 58 38	15°16'08	1°17'10	8°22'28	28°45'15	28°45'15	16°43'16	10°10'11	2°15'11	18°08'42	28°11'13	13°04'41	12°02'22	9°17'19	21°09'19	M29
T 30	17 2 35	16°13'23	16°13'09	9°45'29	29°58'16	29°58'16	16°47'16	10°16'11	2°18'11	18°08'43	28°13'13	13°03'33	12°02'19	9°24'19	21°13'19	T 30
W31	17 6 31	17°11'03	1°32'27	11°05'11	1°12'17	1°12'17	16°52'16	10°22'11	2°22'11	18°08'43	28°14'13	13°03'24	12°02'16	9°31'19	21°17'19	W31

Delta T = 06m34s

Julian Calendar 1 May 1447 == Greg. Calendar 10 May 1447

JUNE 1447 JC

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	17 10 28	18°11'51	16°38'38	12°22'22	2°25'17	2°25'17	17°11'55	16°16'57	10°12'27	2°25'18	18°08'43	28°15'13	13°08'15	12°05'13	9°38'21	T 1
F 2	17 14 24	19°05'05	1°38'38	13°36'33	3°39'18	3°39'18	17°11'55	17°01'16	10°13'33	2°29'18	18°08'44	28°17'13	13°07'15	12°06'09	9°44'21	F 2
S 3	17 18 21	20°02'18	16°19'14	14°47'45	4°52'19	4°52'19	17°16'16	17°06'16	10°13'39	2°32'18	18°08'44	28°18'13	13°06'11	12°06'06	9°51'21	S 3
S 4	17 22 18	20°59'30	0°17'34	15°56'06	6°06'19	6°06'19	17°11'16	17°11'16	10°14'44	2°36'18	18°08'44	28°20'13	12°05'57	12°03'03	9°58'21	S 4
M 5	17 26 14	21°56'43	14°23'17	17°01'07	7°19'20	7°19'20	17°17'16	17°17'16	10°15'50	2°39'18	18°08'45	28°21'13	12°05'55	12°02'00	10°05'21	M 5
T 6	17 30 11	22°53'55	27°47'18	18°03'33	8°33'21	8°33'21	17°22'16	17°22'16	10°16'56	2°43'18	18°08'45	28°22'13	12°05'52	11°05'57	10°11'21	T 6
W 7	17 34 7	23°51'08	10°17'48	19°01'09	9°46'21	9°46'21	17°28'16	17°28'16	11°02'24	2°47'18	18°08'46	28°24'13	12°05'50	11°05'53	10°18'21	W 7
T 8	17 38 4	24°48'20	23°31'19	19°57'10	10°59'22	10°59'22	17°33'16	17°33'16	11°08'25	2°50'18	18°08'46	28°25'13	12°05'51	11°05'50	10°25'21	T 8
F 9	17 42 0	25°45'32	5°18'58	20°49'12	12°13'23	12°13'23	17°39'16	17°39'16	11°14'25	2°54'18	18°08'47	28°27'13	12°05'53	11°04'47	10°31'21	F 9
S 10	17 45 57	26°42'45	18°13'21	21°37'13	13°26'23	13°26'23	17°45'16	17°45'16	11°20'25	2°57'18	18°08'47	28°28'13	12°04'48	11°04'44	10°38'21	S 10
S 11	17 49 53	27°39'57	0°11'20	22°22'14	14°40'24	14°40'24	17°51'16	17°51'16	11°27'30	3°01'18	18°08'48	28°30'13	12°04'41	11°04'41	10°45'22	S 11
M12	17 53 50	28°37'09	12°21'23	23°03'15	15°53'25	15°53'25	17°57'16	17°57'16	11°33'30	3°05'18	18°08'49	28°31'13	12°04'31	11°03'38	10°52'22	M12
T 13	17 57 47	29°34'22	24°17'23	23°40'17	17°06'25	17°06'25	18°04'16	18°04'16	11°39'30	3°08'18	18°08'49	28°33'13	12°04'19	11°03'34	10°58'22	T 13
W14	18 1 43	0°31'34	6°10'24	24°13'18	18°20'26	18°20'26	18°10'16	18°10'16	11°46'30	3°12'18	18°08'50	28°34'13	12°04'05	11°03'31	11°05'22	W14
T 15	18 5 40	1°28'46	18°02'24	24°42'19	19°33'27	19°33'27	18°17'16	18°17'16	11°52'30	3°15'18	18°08'51	28°36'13	12°03'52	11°02'28	11°12'22	T 15
F 16	18 9 36	2°25'58	29°54'25	25°06'20	20°46'27	20°46'27	18°24'16	18°24'16	11°58'30	3°19'18	18°08'52	28°38'13	12°03'39	11°02'25	11°18'22	F 16
S 17	18 13 33	3°23'09	11°12'48	25°27'22	22°00'28	22°00'28	18°31'16	18°31'16	12°05'30	3°23'18	18°08'52	28°39'13	12°03'29	11°02'22	11°25'22	S 17
S 18	18 17 29	4°20'21	23°46'25	25°43'23	23°13'29	23°13'29	18°38'16	18°38'16	12°12'30	3°26'18	18°08'53	28°41'13	12°03'21	11°02'19	11°32'22	S 18
M19	18 21 26	5°17'32	5°17'52	25°54'24	24°26'29	24°26'29	18°45'16	18°45'16	12°18'30	3°30'18	18°08'54	28°42'13	12°03'15	11°02'15	11°39'22	M19
T 20	18 25 22	6°14'43	18°09'26	26°00'25	25°39'00	25°39'00	18°52'16	18°52'16	12°25'30	3°33'18	18°08'55	28°44'13	12°03'11	11°02'12	11°45'22	T 20
W21	18 29 19	7°11'54	0°12'42	26°02'26	26°53'11	26°53'11	19°00'16	19°00'16	12°32'30	3°37'18	18°08'56	28°46'13	12°03'01	11°01'09	11°52'22	W21
T 22	18 33 16	8°09'04	13°35'25	25°59'28	28°06'15	28°06'15	19°07'16	19°07'16	12°38'34	3°41'18	18°08'57	28°47'13	12°02'51	11°01'06	11°59'22	T 22
F 23	18 37 12	9°06'15	26°52'25	25°52'29	29°19'23	29°19'23	19°15'16	19°15'16	12°45'34	3°44'18	18°08'58	28°49'13	12°02'41	11°01'03	12°06'22	F 23
S 24	18 41 9	10°03'26	10°11'38	25°39'00	0°12'32	0°12'32	19°23'16	19°23'16	12°52'34	3°48'18	18°08'59	28°51'13	12°02'31	11°00'09	12°12'22	S 24
S 25	18 45 5	11°00'36	24°52'25	25°23'14	1°46'35	1°46'35	19°31'16	19°31'16	12°59'30	3°52'18	19°00'28	28°52'13	12°02'21	11°00'05	12°19'22	S 25
M26	18 49 2	11°57'47	9°17'34	25°10'25	2°59'43	2°59'43	19°39'16	19°39'16	13°06'30	3°55'18	19°01'28	28°54'13	12°02'15	11°00'05	12°26'22	M26
T 27	18 52 58	12°54'58	24°38'24	24°36'40	4°12'56	4°12'56	19°47'16	19°47'16	13°13'30	3°59'18	19°02'28	28°56'13	12°02'09	11°00'05	12°32'23	T 27
W28	18 56 55	13°52'09	9°35'25	24°7'52	5°25'56	5°25'56	19°55'16	19°55'16	13°20'40	4°02'19	19°03'28	28°57'13	12°01'47	12°01'39	12°39'23	W28
T 29	19 0 52	14°49'20	25°16'23	23°35'68	6°38'20	6°38'20	20°03'16	20°03'16	13°27'40	4°06'19	19°05'28	28°59'13	12°01'28	12°01'44	12°46'23	T 29
F 30	19 4 48	15°46'32	10°18'27	23°30'0	7°12'51	7°12'51	20°12'16	20°12'16	13°34'40	4°09'19	19°07'29	29°00'13	12°01'19	12°01'40	12°53'23	F 30

ASTRODIENST EPHEMERIS for the year 1447

geocentric

JULY 1447 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	19 8 45	16°43'45	25°19	22°R22	9♂ 5	7°54	20°21	13♂41	4°13	19°17	29°2	10°R11	10°Y37	12°59	23°R13	S 1
S 2	19 12 41	17°40'57	9°45	21°542	10°18	8°34	20°29	13°48	4°17	19° 8	29° 4	10°Y 6	10°34	13° 6	23°16	S 2
M 3	19 16 38	18°38'11	23°42	21° 1	11°31	9°13	20°38	13°55	4°20	19° 9	29° 6	10° 4	10°31	13°13	23°19	M 3
T 4	19 20 34	19°35'25	7°Y11	20°20	12°44	9°52	20°47	14° 2	4°24	19°11	29° 7	10°D 3	10°28	13°20	23°22	T 4
W 5	19 24 31	20°32'41	20°13	19°39	13°57	10°32	20°56	14°10	4°27	19°12	29° 9	10°R 3	10°25	13°26	23°25	W 5
T 6	19 28 27	21°29'57	2°54	18°59	15°10	11°11	21° 5	14°17	4°31	19°13	29°11	10° 3	10°21	13°33	23°28	T 6
F 7	19 32 24	22°27'14	15°17	18°21	16°23	11°50	21°14	14°24	4°34	19°15	29°12	10° 1	10°18	13°40	23°31	F 7
S 8	19 36 21	23°24'32	27°26	17°45	17°36	12°29	21°24	14°31	4°38	19°16	29°14	9°57	10°15	13°46	23°33	S 8
S 9	19 40 17	24°21'51	9°II27	17°12	18°49	13° 9	21°33	14°39	4°41	19°18	29°16	9°50	10°12	13°53	23°36	S 9
M10	19 44 14	25°19'11	21°22	16°42	20° 2	13°48	21°43	14°46	4°45	19°19	29°18	9°40	10° 9	14° 0	23°39	M10
T 11	19 48 10	26°16'32	3°515	16°17	21°15	14°27	21°52	14°54	4°48	19°21	29°19	9°29	10° 5	14° 7	23°42	T 11
W12	19 52 7	27°13'53	15° 6	15°57	22°28	15° 6	22° 2	15° 1	4°51	19°22	29°21	9°16	10° 2	14°13	23°44	W12
T 13	19 56 3	28°11'16	26°59	15°42	23°41	15°45	22°12	15° 8	4°55	19°24	29°23	9° 3	9°59	14°20	23°47	T 13
F 14	20 0 0	29° 8'39	8♂L54	15°33	24°54	16°24	22°22	15°16	4°58	19°25	29°25	8°51	9°56	14°27	23°49	F 14
S 15	20 3 56	0♂ 6'03	20°54	15°D29	26° 7	17° 3	22°32	15°23	5° 2	19°27	29°26	8°41	9°53	14°33	23°52	S 15
S 16	20 7 53	1° 3'28	2°II58	15°32	27°19	17°42	22°42	15°31	5° 5	19°28	29°28	8°33	9°50	14°40	23°54	S 16
M17	20 11 50	2° 0'53	15°11	15°41	28°32	18°21	22°52	15°38	5° 8	19°30	29°30	8°28	9°46	14°47	23°56	M17
T 18	20 15 46	2°58'20	27°34	15°56	29°45	19° 0	23° 2	15°46	5°12	19°32	29°32	8°26	9°43	14°54	23°59	T 18
W19	20 19 43	3°55'47	10°II11	16°18	0°II58	19°39	23°13	15°53	5°15	19°33	29°33	8°D25	9°40	15° 0	24° 1	W19
T 20	20 23 39	4°53'14	23° 5	16°46	2°11	20°18	23°23	16° 1	5°18	19°35	29°35	8°26	9°37	15° 7	24° 3	T 20
F 21	20 27 36	5°50'43	6°II19	17°21	3°23	20°57	23°34	16° 9	5°21	19°37	29°37	8°R26	9°34	15°14	24° 5	F 21
S 22	20 31 32	6°48'12	19°58	18° 3	4°36	21°35	23°44	16°16	5°25	19°38	29°38	8°25	9°31	15°21	24° 7	S 22
S 23	20 35 29	7°45'43	4°I 2	18°50	5°49	22°14	23°55	16°24	5°28	19°40	29°40	8°23	9°27	15°27	24° 9	S 23
M24	20 39 25	8°43'14	18°31	19°45	7° 2	22°53	24° 6	16°31	5°31	19°42	29°42	8°18	9°24	15°34	24°11	M24
T 25	20 43 22	9°40'46	3°II22	20°45	8°14	23°32	24°16	16°39	5°34	19°44	29°44	8°11	9°21	15°41	24°13	T 25
W26	20 47 19	10°38'19	18°29	21°51	9°27	24°10	24°27	16°47	5°37	19°46	29°46	8° 3	9°18	15°47	24°15	W26
T 27	20 51 15	11°35'53	3°II40	23° 4	10°39	24°49	24°38	16°54	5°40	19°47	29°47	7°54	9°15	15°54	24°17	T 27
F 28	20 55 12	12°33'29	18°48	24°22	11°52	25°28	24°49	17° 2	5°43	19°49	29°49	7°47	9°11	16° 1	24°18	F 28
S 29	20 59 8	13°31'05	3°II40	25°45	13° 5	26° 6	25° 0	17° 9	5°47	19°51	29°50	7°41	9° 8	16° 8	24°20	S 29
S 30	21 3 5	14°28'43	18°10	27°13	14°17	26°45	25°12	17°17	5°50	19°53	29°52	7°37	9° 5	16°14	24°22	S 30
M31	21 7 1	15°26'22	2°Y13	28°46	15°II30	27°523	25°II23	17°II25	5°553	19°II55	29°554	7°D36	9°Y 2	16°521	24°II23	M31

Delta T = 06m34s

Julian Calendar 1 July 1447 == Greg. Calendar 10 July 1447

AUGUST 1447 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	21 10 58	16°24'03	15°Y48	0♂L23	16°II42	28°5	25°II34	17°II32	5°56	19°II57	29°555	7°Y36	8°Y59	16°528	24°R25	T 1
W 2	21 14 54	17°21'46	28°56	2° 5	17°54	28°40	25°46	17°40	5°58	19°59	29°57	7°37	8°56	16°35	24°26	W 2
T 3	21 18 51	18°19'30	11°B40	3°50	19° 7	29°19	25°57	17°48	6° 1	20° 1	29°59	7°38	8°52	16°41	24°27	T 3
F 4	21 22 48	19°17'16	24° 4	5°38	20°19	29°57	26° 8	17°55	6° 4	20° 3	0♂L 0	7°R38	8°49	16°48	24°29	F 4
S 5	21 26 44	20°15'03	6°II14	7°28	21°32	0♂L36	26°20	18° 3	6° 7	20° 5	0° 2	7°36	8°46	16°55	24°30	S 5
S 6	21 30 41	21°12'53	18°14	9°22	22°44	1°14	26°32	18°11	6°10	20° 7	0° 4	7°33	8°43	17° 1	24°31	S 6
M 7	21 34 37	22°10'44	0°5	11°16	23°56	1°52	26°43	18°18	6°13	20° 9	0° 5	7°28	8°40	17° 8	24°32	M 7
T 8	21 38 34	23° 8'37	11°59	13°13	25° 9	2°31	26°55	18°26	6°15	20°11	0° 7	7°21	8°37	17°15	24°33	T 8
W 9	21 42 30	24° 6'31	23°51	15°11	26°21	3° 9	27° 7	18°34	6°18	20°13	0° 9	7°13	8°33	17°22	24°34	W 9
T 10	21 46 27	25° 4'28	5°II47	17° 9	27°33	3°47	27°19	18°41	6°21	20°15	0°10	7° 5	8°30	17°28	24°35	T 10
F 11	21 50 23	26° 2'25	17°49	19° 8	28°45	4°26	27°31	18°49	6°23	20°17	0°12	6°57	8°27	17°35	24°36	F 11
S 12	21 54 20	27° 0'25	29°57	21° 7	29°57	5° 4	27°43	18°57	6°26	20°19	0°13	6°51	8°24	17°42	24°37	S 12
S 13	21 58 17	27°58'26	12°II14	23° 5	1°II 9	5°42	27°55	19° 4	6°29	20°21	0°15	6°47	8°21	17°48	24°37	S 13
M14	22 2 13	28°56'28	24°40	25° 4	2°22	6°20	28° 7	19°12	6°31	20°23	0°17	6°44	8°17	17°55	24°38	M14
T 15	22 6 10	29°54'32	7°II17	27° 2	3°34	6°59	28°19	19°19	6°34	20°25	0°18	6°D43	8°14	18° 2	24°39	T 15
W16	22 10 6	0°II52'38	20° 6	28°59	4°46	7°37	28°31	19°27	6°36	20°27	0°20	6°44	8°11	18° 9	24°39	W16
T 17	22 14 3	1°50'45	3°II10	0°II56	5°58	8°15	28°45	19°34	6°39	20°29	0°21	6°46	8° 8	18°15	24°39	T 17
F 18	22 17 59	2°48'54	16°30	2°52	7°10	8°53	28°55	19°42	6°41	20°32	0°23	6°47	8° 5	18°22	24°40	F 18
S 19	22 21 56	3°47'04	0°I 8	4°46	8°21	9°31	29° 8	19°50	6°43	20°34	0°24	6°R48	8° 2	18°29	24°40	S 19
S 20	22 25 52	4°45'16	14° 5	6°40	9°33	10° 9	29°20	19°57	6°46	20°36	0°26	6°48	7°58	18°36	24°40	S 20
M21	22 29 49	5°43'29	28°21	8°33	10°45	10°47	29°32	20° 5	6°48	20°38	0°27	6°46	7°55	18°42	24°40	M21
T 22	22 33 46	6°41'43	12°B54	10°24	11°57	11°25	29°45	20°12	6°50	20°40	0°29	6°43	7°52	18°49	24°41	T 22
W23	22 37 42	7°40'00	7°40'00	12°15	13° 9	12° 3	29°57	20°19	6°52	20°42	0°30	6°39	7°49	18°56	24°R41	W23
T 24	22 41 39	8°38'17	12°II28	14° 4	14°20	12°41	0°II10	20°27	6°54	20°45	0°31	6°35	7°46	19° 2	24°41	T 24
F 25	22 45 35	9°36'37	27°16	15°53	15°32	13°19	0°22	20°34	6°57	20°47	0°33	6°32	7°43	19° 9	24°40	F 25
S 26	22 49 32	10°34'58	11°II54	17°40	16°44	13°57	0°35	20°42	6°59	20°49	0°34	6°29	7°39	19°16	24°40	S 26
S 27	22 53 28	11°33'21	26°16	19°26	17°55	14°35	0°47	20°49	7° 1	20°51	0°36	6°27	7°36	19°23	24°40	S 27
M28	22 57 25	12°31'46	10°Y15	21°11	19° 7	15°12	1° 0	20°56	7° 3	20°53	0°37	6°D27	7°33	19°29	24°40	M28
T 29	23 1 21	13°30'12	23°51	22°54	20°18	15°50	1°12	21° 4	7° 4	20°56	0°38	6°28	7°30	19°36	24°39	T 29
W30	23 5 18	14°28'42	7°B 2	24°37	21°30	16°28	1°25	21°11	7° 6	20°58	0°40	6°29	7°27	19°43	24°39	W30
T 31	23 9 15	15°II27'13	19°B50	26°II19	22°II41	17°II 6	1°II38	21°II18	7°II 8	21°II 0	0°II41	6°Y31	7°Y23	19°II49	24°II38	T 31

Delta T = 06m34s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1447

geocentric

SEPTEMBER 1447 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	23 13 11	16 ^h 25'46"	2 ^h 11'18"	27 ^h 59'	23 ^h 52'	17 ^h 04'	1 ^h 51'	21 ^h 02'	7 ^h 01'	21 ^h 02'	0 ^h 04'	6 ^h 32'	7 ^h 17'	19 ^h 56'	24 ^h 38'	F 1
S 2	23 17 8	17 ^h 24'22"	14 ^h 31'	29 ^h 39'	25 ^h 4'	18 ^h 21'	2 ^h 3'	21 ^h 32'	7 ^h 12'	21 ^h 4'	0 ^h 44'	6 ^h 33'	7 ^h 17'	20 ^h 3'	24 ^h 37'	S 2
S 3	23 21 4	18 ^h 23'00"	26 ^h 32'	1 ^h 17'	26 ^h 15'	18 ^h 59'	2 ^h 16'	21 ^h 40'	7 ^h 13'	21 ^h 7'	0 ^h 45'	6 ^h 32'	7 ^h 14'	20 ^h 10'	24 ^h 36'	S 3
M 4	23 25 1	19 ^h 21'41"	8 ^h 52'26"	2 ^h 55'	27 ^h 26'	19 ^h 37'	2 ^h 29'	21 ^h 47'	7 ^h 15'	21 ^h 9'	0 ^h 46'	6 ^h 31'	7 ^h 11'	20 ^h 16'	24 ^h 36'	M 4
T 5	23 28 57	20 ^h 20'23"	20 ^h 18'	4 ^h 31'	28 ^h 37'	20 ^h 14'	2 ^h 42'	21 ^h 54'	7 ^h 17'	21 ^h 11'	0 ^h 47'	6 ^h 30'	7 ^h 8'	20 ^h 23'	24 ^h 35'	T 5
W 6	23 32 54	21 ^h 19'08"	2 ^h 02'12"	6 ^h 7'	29 ^h 48'	20 ^h 52'	2 ^h 55'	22 ^h 1'	7 ^h 18'	21 ^h 13'	0 ^h 49'	6 ^h 28'	7 ^h 4'	20 ^h 30'	24 ^h 34'	W 6
T 7	23 36 50	22 ^h 17'55"	14 ^h 12'	7 ^h 42'	0 ^h 59'	21 ^h 30'	3 ^h 7'	22 ^h 8'	7 ^h 20'	21 ^h 16'	0 ^h 50'	6 ^h 25'	7 ^h 1'	20 ^h 36'	24 ^h 33'	T 7
F 8	23 40 47	23 ^h 16'44"	26 ^h 20'	9 ^h 15'	2 ^h 10'	22 ^h 7'	3 ^h 20'	22 ^h 15'	7 ^h 21'	21 ^h 18'	0 ^h 51'	6 ^h 23'	6 ^h 58'	20 ^h 43'	24 ^h 32'	F 8
S 9	23 44 44	24 ^h 15'35"	8 ^h 39'	10 ^h 48'	3 ^h 21'	22 ^h 45'	3 ^h 33'	22 ^h 22'	7 ^h 23'	21 ^h 20'	0 ^h 52'	6 ^h 22'	6 ^h 55'	20 ^h 50'	24 ^h 31'	S 9
S 10	23 48 40	25 ^h 14'28"	21 ^h 10'	12 ^h 20'	4 ^h 32'	23 ^h 22'	3 ^h 46'	22 ^h 29'	7 ^h 24'	21 ^h 22'	0 ^h 53'	6 ^h 21'	6 ^h 52'	20 ^h 57'	24 ^h 30'	S 10
M 11	23 52 37	26 ^h 13'23"	3 ^h 54'	13 ^h 50'	5 ^h 43'	24 ^h 0'	3 ^h 59'	22 ^h 35'	7 ^h 25'	21 ^h 25'	0 ^h 54'	6 ^h 20'	6 ^h 48'	21 ^h 3'	24 ^h 28'	M 11
T 12	23 56 33	27 ^h 12'20"	16 ^h 51'	15 ^h 20'	6 ^h 54'	24 ^h 37'	4 ^h 12'	22 ^h 42'	7 ^h 27'	21 ^h 27'	0 ^h 55'	6 ^h 20'	6 ^h 45'	21 ^h 10'	24 ^h 27'	T 12
W 13	0 0 30	28 ^h 11'19"	0 ^h 52'	16 ^h 49'	8 ^h 5'	25 ^h 15'	4 ^h 25'	22 ^h 49'	7 ^h 28'	21 ^h 29'	0 ^h 56'	6 ^h 21'	6 ^h 42'	21 ^h 17'	24 ^h 26'	W 13
T 14	0 4 26	29 ^h 10'21"	13 ^h 26'	18 ^h 17'	9 ^h 15'	25 ^h 52'	4 ^h 38'	22 ^h 56'	7 ^h 29'	21 ^h 31'	0 ^h 57'	6 ^h 22'	6 ^h 39'	21 ^h 24'	24 ^h 24'	T 14
F 15	0 8 23	0 ^h 9'24"	27 ^h 3'	19 ^h 45'	10 ^h 26'	26 ^h 30'	4 ^h 51'	23 ^h 2'	7 ^h 30'	21 ^h 33'	0 ^h 58'	6 ^h 22'	6 ^h 36'	21 ^h 30'	24 ^h 23'	F 15
S 16	0 12 19	1 ^h 8'29"	10 ^h 52'	21 ^h 11'	11 ^h 36'	27 ^h 7'	5 ^h 4'	23 ^h 9'	7 ^h 31'	21 ^h 36'	0 ^h 59'	6 ^h 23'	6 ^h 33'	21 ^h 37'	24 ^h 21'	S 16
S 17	0 16 16	2 ^h 7'35"	24 ^h 52'	22 ^h 36'	12 ^h 47'	27 ^h 44'	5 ^h 17'	23 ^h 15'	7 ^h 32'	21 ^h 38'	1 ^h 0'	6 ^h 23'	6 ^h 29'	21 ^h 44'	24 ^h 20'	S 17
M 18	0 20 13	3 ^h 6'44"	9 ^h 31'	24 ^h 0'	13 ^h 57'	28 ^h 22'	5 ^h 30'	23 ^h 22'	7 ^h 33'	21 ^h 40'	1 ^h 1'	6 ^h 23'	6 ^h 26'	21 ^h 50'	24 ^h 18'	M 18
T 19	0 24 9	4 ^h 5'54"	23 ^h 18'	25 ^h 23'	15 ^h 8'	28 ^h 59'	5 ^h 43'	23 ^h 28'	7 ^h 34'	21 ^h 42'	1 ^h 2'	6 ^h 23'	6 ^h 23'	21 ^h 57'	24 ^h 16'	T 19
W 20	0 28 6	5 ^h 5'06"	7 ^h 39'	26 ^h 45'	16 ^h 18'	29 ^h 36'	5 ^h 56'	23 ^h 35'	7 ^h 35'	21 ^h 44'	1 ^h 3'	6 ^h 23'	6 ^h 20'	22 ^h 4'	24 ^h 14'	W 20
T 21	0 32 2	6 ^h 4'20"	22 ^h 2'	28 ^h 6'	17 ^h 28'	0 ^h 14'	6 ^h 9'	23 ^h 41'	7 ^h 36'	21 ^h 47'	1 ^h 4'	6 ^h 23'	6 ^h 17'	22 ^h 11'	24 ^h 13'	T 21
F 22	0 35 59	7 ^h 3'35"	6 ^h 22'	29 ^h 26'	18 ^h 38'	0 ^h 51'	6 ^h 22'	23 ^h 47'	7 ^h 36'	21 ^h 49'	1 ^h 5'	6 ^h 23'	6 ^h 14'	22 ^h 17'	24 ^h 11'	F 22
S 23	0 39 55	8 ^h 2'53"	20 ^h 34'	0 ^h 45'	19 ^h 48'	1 ^h 28'	6 ^h 35'	23 ^h 54'	7 ^h 37'	21 ^h 51'	1 ^h 6'	6 ^h 23'	6 ^h 10'	22 ^h 24'	24 ^h 9'	S 23
S 24	0 43 52	9 ^h 2'12"	4 ^h 35'	2 ^h 2'	20 ^h 58'	2 ^h 5'	6 ^h 48'	24 ^h 0'	7 ^h 38'	21 ^h 53'	1 ^h 7'	6 ^h 23'	6 ^h 7'	22 ^h 31'	24 ^h 7'	S 24
M 25	0 47 48	10 ^h 1'33"	18 ^h 20'	3 ^h 18'	22 ^h 8'	2 ^h 43'	7 ^h 1'	24 ^h 6'	7 ^h 38'	21 ^h 55'	1 ^h 7'	6 ^h 23'	6 ^h 4'	22 ^h 37'	24 ^h 5'	M 25
T 26	0 51 45	11 ^h 0'57"	1 ^h 47'	4 ^h 33'	23 ^h 18'	3 ^h 20'	7 ^h 14'	24 ^h 12'	7 ^h 39'	21 ^h 57'	1 ^h 8'	6 ^h 22'	6 ^h 1'	22 ^h 44'	24 ^h 2'	T 26
W 27	0 55 41	12 ^h 0'23"	14 ^h 53'	5 ^h 46'	24 ^h 28'	3 ^h 57'	7 ^h 27'	24 ^h 18'	7 ^h 39'	22 ^h 0'	1 ^h 9'	6 ^h 22'	5 ^h 58'	22 ^h 51'	24 ^h 0'	W 27
T 28	0 59 38	12 ^h 59'51"	27 ^h 41'	6 ^h 57'	25 ^h 37'	4 ^h 34'	7 ^h 40'	24 ^h 24'	7 ^h 40'	22 ^h 2'	1 ^h 10'	6 ^h 21'	5 ^h 54'	22 ^h 58'	23 ^h 58'	T 28
F 29	1 3 35	13 ^h 59'21"	10 ^h 11'	8 ^h 7'	26 ^h 47'	5 ^h 11'	7 ^h 53'	24 ^h 30'	7 ^h 40'	22 ^h 4'	1 ^h 10'	6 ^h 20'	5 ^h 51'	23 ^h 4'	23 ^h 56'	F 29
S 30	1 7 31	14 ^h 58'54"	22 ^h 12'	9 ^h 15'	27 ^h 56'	5 ^h 48'	8 ^h 6'	24 ^h 36'	7 ^h 40'	22 ^h 6'	1 ^h 11'	6 ^h 19'	5 ^h 48'	23 ^h 51'	23 ^h 53'	S 30

Delta T = 06m34s

Julian Calendar 1 Sept. 1447 == Greg. Calendar 10 Sept. 1447

OCTOBER 1447 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	1 11 28	15 ^h 58'28	4 ^h 27	10 ^h 20	29 ^h 15	6 ^h 25	8 ^h 19	24 ^h 41	7 ^h 41	22 ^h 8	1 ^h 12	6 ^h 19	5 ^h 45	23 ^h 18	23 ^h 51	S 1
M 2	1 15 24	16 ^h 58'06	16 ^h 22	11 ^h 24	0 ^h 15	7 ^h 2	8 ^h 32	24 ^h 47	7 ^h 41	22 ^h 10	1 ^h 12	6 ^h 18	5 ^h 42	23 ^h 24	23 ^h 49	M 2
T 3	1 19 21	17 ^h 57'45	28 ^h 15	12 ^h 25	1 ^h 24	7 ^h 39	8 ^h 45	24 ^h 53	7 ^h 41	22 ^h 12	1 ^h 13	6 ^h 19	5 ^h 39	23 ^h 31	23 ^h 46	T 3
W 4	1 23 17	18 ^h 57'27	10 ^h 9	13 ^h 23	2 ^h 33	8 ^h 16	8 ^h 58	24 ^h 58	7 ^h 41	22 ^h 14	1 ^h 13	6 ^h 19	5 ^h 35	23 ^h 38	23 ^h 43	W 4
T 5	1 27 14	19 ^h 57'11	22 ^h 10	14 ^h 18	3 ^h 42	8 ^h 53	9 ^h 11	25 ^h 4	7 ^h 41	22 ^h 16	1 ^h 14	6 ^h 20	5 ^h 32	23 ^h 45	23 ^h 41	T 5
F 6	1 31 10	20 ^h 56'57	4 ^h 22	15 ^h 9	4 ^h 51	9 ^h 30	9 ^h 24	25 ^h 9	7 ^h 41	22 ^h 18	1 ^h 15	6 ^h 22	5 ^h 29	23 ^h 51	23 ^h 38	F 6
S 7	1 35 7	21 ^h 56'45	16 ^h 47	15 ^h 57	6 ^h 0	10 ^h 7	9 ^h 37	25 ^h 14	7 ^h 41	22 ^h 20	1 ^h 15	6 ^h 23	5 ^h 26	23 ^h 58	23 ^h 36	S 7
S 8	1 39 4	22 ^h 56'36	29 ^h 30	16 ^h 41	7 ^h 9	10 ^h 44	9 ^h 49	25 ^h 20	7 ^h 41	22 ^h 22	1 ^h 15	6 ^h 24	5 ^h 23	24 ^h 5	23 ^h 33	S 8
M 9	1 43 0	23 ^h 56'28	12 ^h 32	17 ^h 20	8 ^h 17	11 ^h 20	10 ^h 2	25 ^h 25	7 ^h 41	22 ^h 24	1 ^h 16	6 ^h 24	5 ^h 19	24 ^h 11	23 ^h 30	M 9
T 10	1 46 57	24 ^h 56'23	25 ^h 51	17 ^h 54	9 ^h 26	11 ^h 57	10 ^h 15	25 ^h 30	7 ^h 40	22 ^h 26	1 ^h 16	6 ^h 23	5 ^h 16	24 ^h 18	23 ^h 27	T 10
W 11	1 50 53	25 ^h 56'20	9 ^h 29	18 ^h 23	10 ^h 34	12 ^h 34	10 ^h 28	25 ^h 35	7 ^h 40	22 ^h 28	1 ^h 17	6 ^h 21	5 ^h 13	24 ^h 25	23 ^h 24	W 11
T 12	1 54 50	26 ^h 56'18	23 ^h 21	18 ^h 45	11 ^h 42	13 ^h 11	10 ^h 41	25 ^h 40	7 ^h 40	22 ^h 30	1 ^h 17	6 ^h 18	5 ^h 10	24 ^h 32	23 ^h 22	T 12
F 13	1 58 46	27 ^h 56'19	7 ^h 24	19 ^h 1	12 ^h 50	13 ^h 47	10 ^h 53	25 ^h 45	7 ^h 39	22 ^h 32	1 ^h 17	6 ^h 15	5 ^h 7	24 ^h 38	23 ^h 19	F 13
S 14	2 2 43	28 ^h 56'21	21 ^h 35	19 ^h 9	13 ^h 58	14 ^h 24	11 ^h 6	25 ^h 50	7 ^h 39	22 ^h 34	1 ^h 18	6 ^h 12	5 ^h 4	24 ^h 45	23 ^h 16	S 14
S 15	2 6 39	29 ^h 56'25	5 ^h 35	19 ^h 10	15 ^h 6	15 ^h 1	11 ^h 19	25 ^h 54	7 ^h 39	22 ^h 36	1 ^h 18	6 ^h 10	5 ^h 0	24 ^h 52	23 ^h 13	S 15
M 16	2 10 36	0 ^h 56'30	20 ^h 4	19 ^h 1	16 ^h 14	15 ^h 37	11 ^h 31	25 ^h 59	7 ^h 38	22 ^h 38	1 ^h 18	6 ^h 8	4 ^h 57	24 ^h 58	23 ^h 10	M 16
T 17	2 14 33	1 ^h 56'37	4 ^h 16	18 ^h 44	17 ^h 21	16 ^h 14	11 ^h 44	26 ^h 4	7 ^h 37	22 ^h 39	1 ^h 18	6 ^h 8	4 ^h 54	25 ^h 5	23 ^h 7	T 17
W 18	2 18 29	2 ^h 56'46	18 ^h 23	18 ^h 17	18 ^h 29	16 ^h 50	11 ^h 57	26 ^h 8	7 ^h 37	22 ^h 41	1 ^h 19	6 ^h 8	4 ^h 51	25 ^h 12	23 ^h 4	W 18
T 19	2 22 26	3 ^h 56'56	2 ^h 24	17 ^h 40	19 ^h 36	17 ^h 27	12 ^h 9	26 ^h 12	7 ^h 36	22 ^h 43	1 ^h 19	6 ^h 10	4 ^h 48	25 ^h 19	23 ^h 0	T 19
F 20	2 26 22	4 ^h 57'07	16 ^h 17	16 ^h 54	20 ^h 43	18 ^h 3	12 ^h 22	26 ^h 17	7 ^h 35	22 ^h 45	1 ^h 19	6 ^h 11	4 ^h 45	25 ^h 25	22 ^h 57	F 20
S 21	2 30 19	5 ^h 57'20	0 ^h 1	15 ^h 58	21 ^h 50	18 ^h 40	12 ^h 34	26 ^h 21	7 ^h 35	22 ^h 47	1 ^h 19	6 ^h 12	4 ^h 41	25 ^h 32	22 ^h 54	S 21
S 22	2 34 15	6 ^h 57'35	13 ^h 34	14 ^h 55	22 ^h 56	19 ^h 16	12 ^h 47	26 ^h 25	7 ^h 34	22 ^h 48	1 ^h 19	6 ^h 12	4 ^h 38	25 ^h 39	22 ^h 51	S 22
M 23	2 38 12	7 ^h 57'51	26 ^h 56	13 ^h 44	24 ^h 3	19 ^h 53	12 ^h 59	26 ^h 29	7 ^h 33	22 ^h 50	1 ^h 19	6 ^h 11	4 ^h 35	25 ^h 45	22 ^h 48	M 23
T 24	2 42 8	8 ^h 58'09	10 ^h 4	12 ^h 28	25 ^h 9	20 ^h 29	13 ^h 12	26 ^h 33	7 ^h 32	22 ^h 52	1 ^h 19	6 ^h 7	4 ^h 32	25 ^h 52	22 ^h 45	T 24
W 25	2 46 5	9 ^h 58'29	22 ^h 59	11 ^h 8	26 ^h 15	21 ^h 5	13 ^h 24	26 ^h 37	7 ^h 31	22 ^h 53	1 ^h 19	6 ^h 2	4 ^h 29	25 ^h 59	22 ^h 41	W 25
T 26	2 50 2	10 ^h 58'50	5 ^h 39	9 ^h 48	27 ^h 21	21 ^h 42	13 ^h 36	26 ^h 41	7 ^h 30	22 ^h 55	1 ^h 19	5 ^h 56	4 ^h 25	26 ^h 6	22 ^h 38	T 26
F 27	2 53 58	11 ^h 59'14	18 ^h 4	8 ^h 30	28 ^h 27	22 ^h 18	13 ^h 48	26 ^h 44	7 ^h 29	22 ^h 57	1 ^h 19	5 ^h 50	4 ^h 22	26 ^h 12	22 ^h 35	F 27
S 28	2 57 55	12 ^h 59'39	0 ^h 16	7 ^h 17	29 ^h 32	22 ^h 54	14 ^h 1	26 ^h 48	7 ^h 27	22 ^h 58	1 ^h 19	5 ^h 43	4 ^h 19	26 ^h 19	22 ^h 31	S 28
S 29	3 1 51	14 ^h 0'06	12 ^h 18	6 ^h 10	0 ^h 38	23 ^h 30	14 ^h 13	26 ^h 51	7 ^h 26	23 ^h 0	1 ^h 19	5 ^h 38	4 ^h 16	26 ^h 26	22 ^h 28	S 29
M 30	3 5 48	15 ^h 0'35	24 ^h 13	5 ^h 12	1 ^h 43	24 ^h 6	14 ^h 25	26 ^h 55	7 ^h 25	23 ^h 1	1 ^h 19	5 ^h 34	4 ^h 13	26 ^h 32	22 ^h 25	M 30
T 31	3 9 44	16 ^h 1'06	6 ^h 4	4 ^h 24	2 ^h 38	24 ^h 22	14 ^h 37	26 ^h 58	7 ^h 24	23 ^h 3	1 ^h 19	5 ^h 31	4 ^h 10	26 ^h 39	22 ^h 21	T 31

ASTRODIENST EPHEMERIS for the year 1447
geocentric

NOVEMBER 1447 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	3 13 41	17♐ 1'39	17♐ 56	3°R48	3♊52	25♐19	14♐49	27♐ 1	7°R22	23♐ 4	1°R19	5°D31	4°Y 6	26♐46	22°R18	W 1
T 2	3 17 37	18° 2'13	29°55	3♐23	4°57	25°55	15° 1	27° 4	7♐21	23° 6	1♐18	5°Y31	4° 3	26°53	22°R15	T 2
F 3	3 21 34	19° 2'49	12♐ 6	3°10	6° 1	26°31	15°13	27° 7	7°20	23° 7	1°18	5°33	4° 0	26°59	22°11	F 3
S 4	3 25 31	20° 3'27	24°33	3°D 8	7° 4	27° 7	15°24	27°10	7°18	23° 9	1°18	5°34	3°57	27° 6	22° 8	S 4
S 5	3 29 27	21° 4'06	7♊20	3°17	8° 8	27°43	15°36	27°13	7°17	23°10	1°18	5°R35	3°54	27°13	22° 4	S 5
M 6	3 33 24	22° 4'48	20°31	3°36	9°11	28°18	15°48	27°16	7°15	23°11	1°17	5°34	3°51	27°19	22° 1	M 6
T 7	3 37 20	23° 5'31	4♐ 6	4° 4	10°14	28°54	16° 0	27°18	7°13	23°13	1°17	5°30	3°47	27°26	21°58	T 7
W 8	3 41 17	24° 6'15	18° 5	4°40	11°17	29°30	16°11	27°21	7°12	23°14	1°17	5°25	3°44	27°33	21°54	W 8
T 9	3 45 13	25° 7'01	2♊24	5°24	12°19	0♊ 6	16°23	27°23	7°10	23°15	1°16	5°17	3°41	27°40	21°51	T 9
F 10	3 49 10	26° 7'48	16°57	6°15	13°21	0°42	16°34	27°25	7° 8	23°17	1°16	5° 9	3°38	27°46	21°48	F 10
S 11	3 53 6	27° 8'36	1♊38	7°11	14°23	1°17	16°46	27°27	7° 7	23°18	1°15	5° 1	3°35	27°53	21°44	S 11
S 12	3 57 3	28° 9'26	16°17	8°12	15°24	1°53	16°57	27°29	7° 5	23°19	1°15	4°53	3°31	28° 0	21°41	S 12
M13	4 1 0	29°10'16	0♊50	9°18	16°25	2°29	17° 8	27°31	7° 3	23°20	1°14	4°48	3°28	28° 6	21°37	M13
T 14	4 4 56	0♊11'08	15°11	10°27	17°26	3° 4	17°19	27°33	7° 1	23°21	1°14	4°44	3°25	28°13	21°34	T 14
W15	4 8 53	1°12'00	29°17	11°40	18°26	3°40	17°30	27°35	6°59	23°22	1°13	4°D43	3°22	28°20	21°31	W15
T 16	4 12 49	2°12'53	13♐ 8	12°55	19°26	4°15	17°41	27°37	6°57	23°23	1°13	4°44	3°19	28°27	21°27	T 16
F 17	4 16 46	3°13'46	26°43	14°13	20°25	4°51	17°52	27°38	6°55	23°24	1°12	4°45	3°16	28°33	21°24	F 17
S 18	4 20 42	4°14'41	10°Y 5	15°33	21°24	5°26	18° 3	27°40	6°53	23°25	1°11	4°R45	3°12	28°40	21°21	S 18
S 19	4 24 39	5°15'36	23°15	16°54	22°22	6° 1	18°14	27°41	6°51	23°26	1°11	4°43	3° 9	28°47	21°18	S 19
M20	4 28 35	6°16'32	6♊13	18°18	23°20	6°36	18°25	27°42	6°49	23°27	1°10	4°39	3° 6	28°53	21°14	M20
T 21	4 32 32	7°17'29	19° 0	19°42	24°17	7°12	18°35	27°43	6°47	23°28	1° 9	4°32	3° 3	29° 0	21°11	T 21
W22	4 36 29	8°18'27	1♐37	21° 8	25°14	7°47	18°46	27°44	6°45	23°29	1° 9	4°22	3° 0	29° 7	21° 8	W22
T 23	4 40 25	9°19'26	14° 3	22°34	26°10	8°22	18°56	27°45	6°42	23°30	1° 8	4°10	2°57	29°14	21° 5	T 23
F 24	4 44 22	10°20'26	26°20	24° 1	27° 6	8°57	19° 6	27°46	6°40	23°31	1° 7	3°57	2°53	29°20	21° 2	F 24
S 25	4 48 18	11°21'26	8♐27	25°30	28° 1	9°32	19°17	27°46	6°38	23°32	1° 6	3°44	2°50	29°27	20°58	S 25
S 26	4 52 15	12°22'28	20°25	26°58	28°56	10° 7	19°27	27°47	6°36	23°32	1° 6	3°33	2°47	29°34	20°55	S 26
M27	4 56 11	13°23'31	2♐18	28°27	29°49	10°42	19°37	27°47	6°33	23°33	1° 5	3°23	2°44	29°40	20°52	M27
T 28	5 0 8	14°24'34	14° 7	29°57	0♊43	11°17	19°47	27°48	6°31	23°34	1° 4	3°16	2°41	29°47	20°49	T 28
W29	5 4 5	15°25'38	25°58	1♊27	1°35	11°52	19°57	27°48	6°29	23°34	1° 3	3°12	2°37	29°54	20°46	W29
T 30	5 8 1	16♊26'43	7♐53	2♊57	2♊27	12♐26	20♐ 6	27°R48	6♐26	23♐35	1♐ 2	3°Y10	2°Y34	0♐ 0	20°R43	T 30

Delta T = 06m33s

Julian Calendar 1 Nov. 1447 == Greg. Calendar 10 Nov. 1447

DECEMBER 1447 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	5 11 58	17♐27'49	20♐ 0	4♊28	3♊18	13♐ 1	20♐16	27°R48	6°R24	23♐36	1°R 1	3°D10	2°Y31	0♐ 7	20°R40	F 1
S 2	5 15 54	18°28'56	2♊22	5°59	4° 8	13°36	20°26	27♐48	6♐21	23°36	1♐ 0	3°R10	2°28	0°14	20°R37	S 2
S 3	5 19 51	19°30'04	15° 6	7°31	4°57	14°10	20°35	27°47	6°19	23°37	0°59	3°Y 9	2°25	0°21	20°35	S 3
M 4	5 23 47	20°31'13	28°16	9° 2	5°46	14°45	20°44	27°47	6°17	23°37	0°58	3° 7	2°22	0°27	20°32	M 4
T 5	5 27 44	21°32'22	11♐54	10°34	6°34	15°19	20°54	27°46	6°14	23°38	0°57	3° 2	2°18	0°34	20°29	T 5
W 6	5 31 40	22°33'32	26° 1	12° 6	7°20	15°54	21° 3	27°46	6°12	23°38	0°56	2°54	2°15	0°41	20°26	W 6
T 7	5 35 37	23°34'43	10♊35	13°38	8° 6	16°28	21°12	27°45	6° 9	23°38	0°55	2°44	2°12	0°47	20°24	T 7
F 8	5 39 34	24°35'54	25°29	15°11	8°51	17° 2	21°21	27°44	6° 7	23°39	0°54	2°33	2° 9	0°54	20°21	F 8
S 9	5 43 30	25°37'05	10♊34	16°44	9°35	17°37	21°29	27°43	6° 4	23°39	0°53	2°21	2° 6	1° 1	20°18	S 9
S 10	5 47 27	26°38'17	25°40	18°17	10°18	18°11	21°38	27°42	6° 1	23°39	0°52	2°10	2° 3	1° 8	20°16	S 10
M11	5 51 23	27°39'29	10♊37	19°50	10°59	18°45	21°47	27°41	5°59	23°40	0°51	2° 1	1°59	1°14	20°13	M11
T 12	5 55 20	28°40'41	25°17	21°24	11°40	19°19	21°55	27°40	5°56	23°40	0°50	1°56	1°56	1°21	20°11	T 12
W13	5 59 16	29°41'52	9♐36	22°58	12°19	19°53	22° 3	27°39	5°54	23°40	0°49	1°53	1°53	1°28	20° 8	W13
T 14	6 3 13	0♊43'03	23°31	24°32	12°57	20°26	22°12	27°37	5°51	23°40	0°48	1°52	1°50	1°34	20° 6	T 14
F 15	6 7 9	1°44'14	7°Y 4	26° 6	13°34	21° 0	22°20	27°36	5°49	23°40	0°46	1°52	1°47	1°41	20° 4	F 15
S 16	6 11 6	2°45'25	20°17	27°41	14° 9	21°34	22°27	27°34	5°46	23°40	0°45	1°51	1°43	1°48	20° 1	S 16
S 17	6 15 3	3°46'36	3♐13	29°16	14°43	22° 7	22°35	27°32	5°43	23°R40	0°44	1°49	1°40	1°55	19°59	S 17
M18	6 18 59	4°47'46	15°54	0♊51	15°15	22°41	22°43	27°30	5°41	23°40	0°43	1°44	1°37	2° 1	19°57	M18
T 19	6 22 56	5°48'56	28°24	2°27	15°46	23°14	22°50	27°28	5°38	23°40	0°42	1°35	1°34	2° 8	19°55	T 19
W20	6 26 52	6°50'06	10♐45	4° 3	16°15	23°48	22°58	27°26	5°36	23°40	0°40	1°24	1°31	2°15	19°53	W20
T 21	6 30 49	7°51'16	22°57	5°39	16°42	24°21	23° 5	27°24	5°33	23°40	0°39	1°11	1°28	2°21	19°51	T 21
F 22	6 34 45	8°52'25	5♐ 3	7°16	17° 8	24°54	23°12	27°22	5°30	23°40	0°38	0°56	1°24	2°28	19°49	F 22
S 23	6 38 42	9°53'34	17° 2	8°54	17°32	25°27	23°19	27°19	5°28	23°40	0°37	0°41	1°21	2°35	19°47	S 23
S 24	6 42 39	10°54'43	28°57	10°31	17°54	26° 0	23°26	27°17	5°25	23°40	0°35	0°28	1°18	2°41	19°45	S 24
M25	6 46 35	11°55'52	10♐47	12° 9	18°14	26°33	23°33	27°14	5°23	23°39	0°34	0°16	1°15	2°48	19°44	M25
T 26	6 50 32	12°57'00	22°37	13°48	18°32	27° 6	23°39	27°11	5°20	23°39	0°33	0° 8	1°12	2°55	19°42	T 26
W27	6 54 28	13°58'08	4♐27	15°27	18°48	27°39	23°45	27° 9	5°18	23°39	0°32	0° 2	1° 9	3° 2	19°41	W27
T 28	6 58 25	14°59'16	16°23	17° 7	19° 2	28°11	23°52	27° 6	5°15	23°38	0°30	29♐59	1° 5	3° 8	19°39	T 28
F 29	7 2 21	16° 0'24	28°27	18°47	19°14	28°44	23°58	27° 3	5°12	23°38	0°29	29°D58	1° 2	3°15	19°37	F 29
S 30	7 6 18	17° 1'32	10♐46	20°27	19°23	29°16	24° 4	27° 0	5°10	23°38	0°28	29°R59	0°59	3°22	19°36	S 30
S 31	7 10 14	18♊ 2'39	23♐24	22♊ 8	19♊30	29♐49	24♐ 9	26♐57	5♐ 7	23♐37	0♐26	29♐59	0°Y56	3♐28	19°R35	S 31

Delta T = 06m33s

Julian Calendar