



Astrodienst Ephemeris Tables for the year 1461

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 1461
geocentric

JANUARY 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	7 17 31	19°55'12	15°26	23°10	3°49	2°34	24°33	22°30	8°R 6	22°0	22°R22	19°R24	19°24	22°32	0°30	T 1
F 2	7 21 28	20°56'17	29°28	24°52	4°44	2°51	24°43	22°37	8°R 4	22°0	22°R20	19°24	19°20	22°39	0°34	F 2
S 3	7 25 24	21°57'22	13°2	26°34	5°39	3°8	24°53	22°45	8°3	22°1	22°19	19°24	19°17	22°45	0°38	S 3
S 4	7 29 21	22°58'26	26°12	28°17	6°35	3°24	25°3	22°52	8°1	22°1	22°18	19°D24	19°14	22°52	0°42	S 4
M 5	7 33 18	23°59'30	8°58	29°59	7°31	3°39	25°12	22°59	8°0	22°2	22°17	19°24	19°11	22°58	0°45	M 5
T 6	7 37 14	25°0'34	21°26	1°43	8°28	3°54	25°22	23°6	7°58	22°2	22°15	19°25	19°8	23°5	0°48	T 6
W 7	7 41 11	26°1'37	3°39	3°27	9°25	4°9	25°32	23°13	7°56	22°2	22°14	19°25	19°5	23°12	0°52	W 7
T 8	7 45 7	27°2'39	15°40	5°11	10°23	4°23	25°41	23°20	7°55	22°2	22°13	19°26	19°1	23°18	0°55	T 8
F 9	7 49 4	28°3'41	27°34	6°55	11°22	4°37	25°50	23°27	7°53	22°2	22°11	19°27	18°58	23°25	0°58	F 9
S 10	7 53 0	29°4'42	9°23	8°39	12°20	4°50	25°59	23°34	7°51	22°3	22°10	19°28	18°55	23°32	1°1	S 10
S 11	7 56 57	0°5'42	21°10	10°24	13°20	5°2	26°8	23°41	7°49	22°3	22°9	19°R28	18°52	23°38	1°4	S 11
M 12	8 0 53	1°6'41	2°57	12°8	14°20	5°14	26°17	23°48	7°47	22°3	22°7	19°28	18°49	23°45	1°6	M 12
T 13	8 4 50	2°7'39	14°47	13°52	15°20	5°25	26°26	23°56	7°45	22°3	22°6	19°26	18°45	23°52	1°9	T 13
W 14	8 8 47	3°8'36	26°41	15°36	16°20	5°36	26°35	24°3	7°43	22°R 3	22°5	19°25	18°42	23°58	1°12	W 14
T 15	8 12 43	4°9'32	8°42	17°18	17°21	5°47	26°43	24°10	7°41	22°3	22°3	19°22	18°39	24°5	1°14	T 15
F 16	8 16 40	5°10'27	20°52	19°0	18°22	5°56	26°52	24°17	7°39	22°3	22°2	19°20	18°36	24°12	1°16	F 16
S 17	8 20 36	6°11'20	3°14	20°41	19°24	6°5	27°0	24°24	7°37	22°3	22°0	19°18	18°33	24°18	1°18	S 17
S 18	8 24 33	7°12'12	15°49	22°19	20°26	6°14	27°8	24°31	7°35	22°3	21°59	19°16	18°30	24°25	1°20	S 18
M 19	8 28 29	8°13'02	28°42	23°56	21°28	6°22	27°16	24°38	7°33	22°2	21°57	19°14	18°26	24°32	1°22	M 19
T 20	8 32 26	9°13'51	11°56	25°30	22°31	6°29	27°24	24°45	7°31	22°2	21°56	19°D14	18°23	24°38	1°24	T 20
W 21	8 36 22	10°14'39	25°32	27°1	23°34	6°36	27°32	24°52	7°29	22°2	21°55	19°15	18°20	24°45	1°26	W 21
T 22	8 40 19	11°15'25	9°32	28°28	24°37	6°42	27°40	24°59	7°26	22°2	21°53	19°16	18°17	24°51	1°27	T 22
F 23	8 44 16	12°16'09	23°56	29°51	25°41	6°47	27°47	25°5	7°24	22°1	21°52	19°18	18°14	24°58	1°29	F 23
S 24	8 48 12	13°16'52	8°41	1°9	26°45	6°52	27°55	25°12	7°22	22°1	21°50	19°19	18°11	25°5	1°30	S 24
S 25	8 52 9	14°17'33	23°43	2°21	27°49	6°56	28°2	25°19	7°19	22°1	21°49	19°R19	18°7	25°11	1°32	S 25
M 26	8 56 5	15°18'12	8°53	3°27	28°53	6°59	28°9	25°26	7°17	22°0	21°47	19°18	18°4	25°18	1°33	M 26
T 27	9 0 2	16°18'51	24°2	4°26	29°58	7°2	28°16	25°33	7°15	22°0	21°46	19°15	18°1	25°25	1°34	T 27
W 28	9 3 58	17°19'27	9°1	5°16	1°3	7°4	28°23	25°40	7°12	22°0	21°44	19°12	17°58	25°31	1°35	W 28
T 29	9 7 55	18°20'02	23°41	5°58	2°8	7°5	28°30	25°46	7°10	21°59	21°43	19°7	17°55	25°38	1°35	T 29
F 30	9 11 51	19°20'36	7°55	6°31	3°13	7°R 6	28°36	25°53	7°8	21°59	21°41	19°3	17°51	25°45	1°36	F 30
S 31	9 15 48	20°21'09	21°42	6°54	4°19	7°5	28°43	26°0	7°15	21°58	21°40	18°59	17°48	25°51	1°37	S 31

Delta T = 06m09s

Julian Calendar 1 Jan. 1461 == Greg. Calendar 10 Jan. 1461

FEBRUARY 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	9 19 45	21°21'40	5°10	7°8	5°25	7°R 4	28°49	26°7	7°R 3	21°R57	21°R38	18°R57	17°45	25°58	1°37	S 1
M 2	9 23 41	22°22'10	17°51	7°R11	6°31	7°5	28°55	26°13	7°10	21°57	21°R37	18°D55	17°42	26°5	1°37	M 2
T 3	9 27 38	23°22'39	0°20	7°3	7°37	7°0	29°1	26°20	6°58	21°56	21°35	18°55	17°39	26°11	1°38	T 3
W 4	9 31 34	24°23'06	12°30	6°46	8°43	6°57	29°7	26°26	6°55	21°55	21°34	18°57	17°36	26°18	1°R38	W 4
T 5	9 35 31	25°23'33	24°28	6°19	9°50	6°53	29°12	26°33	6°52	21°55	21°32	18°58	17°32	26°25	1°38	T 5
F 6	9 39 27	26°23'57	6°18	5°43	10°57	6°48	29°18	26°39	6°50	21°54	21°31	19°0	17°29	26°31	1°37	F 6
S 7	9 43 24	27°24'20	18°4	4°59	12°4	6°42	29°23	26°46	6°47	21°53	21°29	19°R 1	17°26	26°38	1°37	S 7
S 8	9 47 20	28°24'42	29°50	4°8	13°11	6°36	29°28	26°52	6°45	21°52	21°28	19°0	17°23	26°44	1°37	S 8
M 9	9 51 17	29°25'02	11°40	3°12	14°18	6°29	29°33	26°59	6°42	21°52	21°26	18°57	17°20	26°51	1°36	M 9
T 10	9 55 14	0°25'20	23°36	2°12	15°26	6°21	29°38	27°5	6°40	21°51	21°25	18°53	17°16	26°58	1°36	T 10
W 11	9 59 10	1°25'36	5°40	1°9	16°33	6°12	29°42	27°11	6°37	21°50	21°23	18°46	17°13	27°4	1°35	W 11
T 12	10 3 7	2°25'51	17°54	0°5	17°41	6°3	29°47	27°18	6°34	21°49	21°22	18°38	17°10	27°11	1°34	T 12
F 13	10 7 3	3°26'04	0°18	2°2	18°49	5°52	29°51	27°24	6°32	21°48	21°20	18°30	17°7	27°18	1°33	F 13
S 14	10 11 0	4°26'14	12°53	28°1	19°57	5°41	29°55	27°30	6°29	21°47	21°19	18°21	17°4	27°24	1°32	S 14
S 15	10 14 56	5°26'23	25°41	27°3	21°5	5°29	29°59	27°36	6°27	21°46	21°17	18°14	17°1	27°31	1°31	S 15
M 16	10 18 53	6°26'30	8°41	26°10	22°13	5°17	0°3	27°42	6°24	21°45	21°16	18°9	16°57	27°38	1°30	M 16
T 17	10 22 49	7°26'34	21°57	25°22	23°22	5°4	0°7	27°48	6°21	21°44	21°14	18°5	16°54	27°44	1°28	T 17
W 18	10 26 46	8°26'37	5°28	24°39	24°30	4°49	0°10	27°54	6°19	21°43	21°13	18°D 4	16°51	27°51	1°27	W 18
T 19	10 30 42	9°26'37	19°17	24°3	25°39	4°35	0°13	28°0	6°16	21°42	21°12	18°4	16°48	27°58	1°25	T 19
F 20	10 34 39	10°26'35	3°24	23°33	26°48	4°19	0°16	28°6	6°13	21°41	21°10	18°5	16°45	28°4	1°23	F 20
S 21	10 38 36	11°26'31	17°49	23°10	27°56	4°3	0°19	28°12	6°11	21°40	21°9	18°R 6	16°42	28°11	1°22	S 21
S 22	10 42 32	12°26'24	2°28	22°54	29°5	3°46	0°22	28°18	6°8	21°39	21°7	18°5	16°38	28°18	1°20	S 22
M 23	10 46 29	13°26'15	17°18	22°44	0°14	3°29	0°24	28°24	6°6	21°37	21°6	18°2	16°35	28°24	1°18	M 23
T 24	10 50 25	14°26'05	2°11	22°D40	1°24	3°11	0°27	28°29	6°3	21°36	21°5	17°56	16°32	28°31	1°16	T 24
W 25	10 54 22	15°25'52	17°0	22°43	2°33	2°52	0°29	28°35	6°0	21°35	21°3	17°49	16°29	28°37	1°13	W 25
T 26	10 58 18	16°25'37	1°36	22°52	3°42	2°33	0°31	28°40	5°58	21°34	21°2	17°39	16°26	28°44	1°11	T 26
F 27	11 2 15	17°25'20	15°51	23°6	4°52	2°13	0°33	28°46	5°55	21°32	21°1	17°30	16°22	28°51	1°9	F 27
S 28	11 6 11	18°25'01	29°42	23°26	6°1	1°53	0°34	28°51	5°15	21°31	20°59	17°21	16°19	28°57	1°16	S 28

Delta T = 06m09s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1461

geocentric

MARCH 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	11 10 8	19°42'40	13°11'5	23°50'50	7°11'11	1°R32	0°36'36	28°57'57	5°R50	21°R30	20°R58	17°R13	16°16'16	29°4'4	1°R 4	S 1
M 2	11 14 5	20°24'18	26°2'2	24°20'8	8°21'1	1°11'11	0°37'37	29°2'2	5°48'48	21°12'28	20°15'57	17°18'8	16°10'13	29°11'11	1°11'1	M 2
T 3	11 18 1	21°23'54	8°35'35	24°53'9	9°31'0	0°50'0	0°38'38	29°7'7	5°45'45	21°27'27	20°55'55	17°5'5	16°10'10	29°17'17	0°58'8	T 3
W 4	11 21 58	22°23'28	20°48'25	25°31'10	10°40'0	0°28'0	0°39'39	29°12'12	5°43'43	21°26'26	20°54'54	17°D 4	16°7'7	29°24'24	0°55'5	W 4
T 5	11 25 54	23°23'01	2°34'47	26°13'11	11°50'0	0°6'6	0°40'40	29°18'18	5°40'40	21°24'24	20°53'53	17°5'5	16°3'3	29°31'31	0°52'2	T 5
F 6	11 29 51	24°22'31	14°37'14	26°59'13	1°13'1	29°43'43	0°40'40	29°23'23	5°38'38	21°23'23	20°52'52	17°R 5	16°0'0	29°37'37	0°49'9	F 6
S 7	11 33 47	25°22'00	26°23'26	27°48'14	1°11'1	29°20'20	0°40'40	29°28'28	5°35'35	21°22'22	20°51'51	17°5'5	15°57'57	29°44'44	0°46'6	S 7
S 8	11 37 44	26°21'27	8°11'11	28°40'15	15°21'28	28°57'0	0°R41	29°33'33	5°33'33	21°20'20	20°49'49	17°2'2	15°54'54	29°51'51	0°43'3	S 8
M 9	11 41 40	27°20'52	20°5'20	29°35'16	16°31'28	28°34'0	0°41'41	29°37'37	5°31'31	21°19'19	20°48'48	16°58'58	15°51'51	29°57'57	0°40'0	M 9
T 10	11 45 37	28°20'15	2°11'38	0°34'34	17°42'28	28°11'0	0°40'40	29°42'42	5°28'28	21°17'17	20°47'47	16°50'50	15°48'48	0°4'4	0°36'6	T 10
W 11	11 49 34	29°19'36	14°23'14	1°35'18	18°52'27	27°47'0	0°40'40	29°47'47	5°26'26	21°16'16	20°46'46	16°40'40	15°44'44	0°11'11	0°33'3	W 11
T 12	11 53 30	0°18'55	26°52'26	2°38'20	2°2'27	27°24'0	0°39'39	29°52'52	5°24'24	21°14'14	20°45'45	16°28'28	15°41'41	0°17'17	0°29'9	T 12
F 13	11 57 27	1°18'12	9°13'34	4°45'21	1°13'27	1°1'0	0°38'38	29°56'56	5°21'21	21°13'13	20°44'44	16°15'15	15°38'38	0°24'24	0°26'6	F 13
S 14	12 1 23	2°17'27	22°29'4	5°53'22	2°24'26	2°37'0	0°37'37	0°1'1	5°19'19	21°11'11	20°43'43	16°3'3	15°35'35	0°30'30	0°22'2	S 14
S 15	12 5 20	3°16'40	5°36'6	6°3'23	3°34'26	1°14'0	0°36'36	0°5'5	5°17'17	21°10'10	20°42'42	15°51'51	15°32'32	0°37'37	0°18'8	S 15
M 16	12 9 16	4°15'51	18°55'7	1°16'24	4°45'25	1°51'0	0°35'35	0°9'9	5°15'15	21°8'8	20°41'41	15°42'42	15°28'28	0°44'44	0°14'14	M 16
T 17	12 13 13	5°14'59	2°11'25	8°31'25	2°56'25	2°29'0	0°33'33	0°14'14	5°12'12	21°6'6	20°40'40	15°36'36	15°25'25	0°50'50	0°10'10	T 17
W 18	12 17 9	6°14'05	16°5'16	9°48'27	6°2'25	2°5'0	0°31'31	0°18'18	5°10'10	21°5'5	20°39'39	15°33'33	15°22'22	0°57'57	0°7'7	W 18
T 19	12 21 6	7°13'09	29°54'11	1°7'28	17°24'24	2°44'0	0°29'29	0°22'22	5°8'8	21°3'3	20°38'38	15°31'31	15°19'19	1°4'4	0°3'3	T 19
F 20	12 25 3	8°12'11	13°54'13	12°27'29	2°28'24	2°22'0	0°27'27	0°26'26	5°6'6	21°2'2	20°37'37	15°31'31	15°16'16	1°10'10	29°59'59	F 20
S 21	12 28 59	9°11'10	28°4'28	13°50'0	0°39'24	2°0'0	0°25'25	0°30'30	5°4'4	21°0'0	20°36'36	15°31'31	15°13'13	1°17'17	29°54'54	S 21
S 22	12 32 56	10°10'06	12°23'15	1°14'15	2°39'23	3°39'0	0°23'23	0°34'34	5°2'2	20°59'59	20°35'35	15°29'29	15°9'9	1°24'24	29°50'50	S 22
M 23	12 36 52	11°9'01	26°48'16	1°40'3	1°23'19	3°19'0	0°20'20	0°38'38	5°0'0	20°57'57	20°34'34	15°25'25	15°6'6	1°30'30	29°46'46	M 23
T 24	12 40 49	12°7'53	11°16'18	8°8'4	4°12'22	2°59'0	0°17'17	0°42'42	4°58'58	20°55'55	20°33'33	15°18'18	15°3'3	1°37'37	29°42'42	T 24
W 25	12 44 45	13°6'42	2°54'19	19°37'5	5°23'22	2°39'0	0°14'14	0°45'45	4°56'56	20°54'54	20°33'33	15°8'8	15°0'0	1°44'44	29°38'38	W 25
T 26	12 48 42	14°5'30	9°57'21	9°6'35	2°20'22	2°0'0	0°11'11	0°49'49	4°54'54	20°52'52	20°32'32	14°57'57	14°57'57	1°50'50	29°33'33	T 26
F 27	12 52 38	15°4'16	23°58'22	4°1'7	4°46'22	2°1'0	0°8'8	0°52'52	4°53'53	20°50'50	20°31'31	14°44'44	14°53'53	1°57'57	29°29'29	F 27
S 28	12 56 35	16°2'59	7°11'24	8°57'21	4°3'21	2°43'0	0°4'4	0°56'56	4°51'51	20°49'49	20°30'30	14°33'33	14°50'50	2°4'4	29°24'24	S 28
S 29	13 0 31	17°1'41	20°58'25	5°2'10	8°1'21	2°6'0	0°0'0	0°59'59	4°49'49	20°47'47	20°29'29	14°23'23	14°47'47	2°10'10	29°20'20	S 29
M 30	13 4 28	18°0'21	3°53'27	2°29'11	1°20'21	2°9'0	29°15'56	1°2'2	4°47'47	20°46'46	20°29'29	14°16'16	14°44'44	2°17'17	29°16'16	M 30
T 31	13 8 25	18°58'59	16°27'16	29°8'8	12°31'12	20°53'53	29°15'52	1°5'5	4°46'46	20°44'44	20°12'12	14°11'11	14°41'41	2°24'24	29°11'11	T 31

Delta T = 06m09s

Julian Calendar 1 March 1461 == Greg. Calendar 10 March 1461

APRIL 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	13 12 21	19°57'36	28°42'28	0°49'13	13°42'20	20°R38	29°R48	1°11'8	4°R44	20°R42	20°R28	14°R 8	14°38'38	2°30'30	29°R 7	W 1
T 2	13 16 18	20°56'11	10°34'10	2°32'14	14°54'20	20°24'29	29°14'44	1°11'11	4°43'43	20°41'41	20°12'27	14°D 8	14°34'34	2°37'37	29°12'12	T 2
F 3	13 20 14	21°54'44	22°34'4	4°16'16	16°5'20	20°10'29	29°39'39	1°14'14	4°41'41	20°39'39	20°26'26	14°R 8	14°31'31	2°43'43	28°57'57	F 3
S 4	13 24 11	22°53'16	4°23'23	6°2'17	17°17'19	19°57'57	29°35'35	1°17'17	4°40'40	20°37'37	20°26'26	14°18'18	14°28'28	2°50'50	28°53'53	S 4
S 5	13 28 7	23°51'45	16°13'16	7°49'18	18°28'19	19°44'29	29°30'30	1°20'20	4°38'38	20°36'36	20°25'25	14°5'5	14°25'25	2°57'57	28°48'48	S 5
M 6	13 32 4	24°50'14	28°10'9	9°38'19	19°40'19	19°32'29	29°25'25	1°22'22	4°37'37	20°34'34	20°25'25	14°1'1	14°22'22	3°3'3	28°44'44	M 6
T 7	13 36 0	25°48'40	10°19'11	11°29'20	20°52'19	19°22'29	29°20'20	1°25'25	4°35'35	20°32'32	20°24'24	13°55'55	14°19'19	3°10'10	28°39'39	T 7
W 8	13 39 57	26°47'05	22°42'13	12°21'22	2°3'19	19°12'12	29°14'14	1°27'27	4°34'34	20°31'31	20°24'24	13°45'45	14°15'15	3°17'17	28°34'34	W 8
T 9	13 43 54	27°45'28	5°23'15	15°15'23	1°15'19	2°2'29	29°9'9	1°30'30	4°33'33	20°29'29	20°23'23	13°34'34	14°12'12	3°23'23	28°30'30	T 9
F 10	13 47 50	28°43'49	18°22'17	17°11'24	2°27'18	1°54'29	29°3'3	1°32'32	4°32'32	20°28'28	20°23'23	13°22'22	14°9'9	3°30'30	28°25'25	F 10
S 11	13 51 47	29°42'08	1°37'19	19°9'25	3°38'18	1°46'28	28°58'58	1°34'34	4°30'30	20°26'26	20°23'23	13°10'10	14°6'6	3°37'37	28°20'20	S 11
S 12	13 55 43	0°40'26	15°8'21	2°8'26	5°0'18	1°39'28	28°52'52	1°36'36	4°29'29	20°24'24	20°22'22	12°59'59	14°3'3	3°43'43	28°16'16	S 12
M 13	13 59 40	1°38'42	28°51'23	2°8'28	2°3'18	1°33'28	28°46'46	1°38'38	4°28'28	20°23'23	20°22'22	12°50'50	13°59'59	3°50'50	28°11'11	M 13
T 14	14 3 36	2°36'56	12°11'22	2°10'29	1°10'18	1°28'28	28°40'40	1°40'40	4°27'27	20°21'21	20°22'22	12°45'45	13°56'56	3°57'57	28°7'7	T 14
W 15	14 7 33	3°35'08	26°43'27	1°14'0	2°26'18	1°23'28	28°34'34	1°42'42	4°26'26	20°20'20	20°21'21	12°41'41	13°53'53	4°3'3	28°2'2	W 15
T 16	14 11 29	4°33'18	10°54'29	1°19'13	1°37'18	1°20'28	28°27'27	1°43'43	4°25'25	20°18'18	20°21'21	12°D 41	13°50'50	4°10'10	27°57'57	T 16
F 17	14 15 26	5°31'26	24°52'18	2°25'18	2°49'18	1°17'28	28°21'21	1°45'45	4°24'24	20°16'16	20°21'21	12°41'41	13°47'47	4°17'17	27°53'53	F 17
S 18	14 19 23	6°29'32	8°59'3	3°33'4	1°1'18	1°15'28	28°14'14	1°46'46	4°24'24	20°15'15	20°21'21	12°R 41	13°44'44	4°23'23	27°48'48	S 18
S 19	14 23 19	7°27'36	23°8'23	5°41'5	5°13'18	1°13'28	28°8'8	1°48'48	4°23'23	20°13'13	20°21'21	12°40'40	13°40'40	4°30'30	27°44'44	S 19
M 20	14 27 16	8°25'38	7°15'7	7°50'6	6°25'18	1°D 13	28°1'1	1°49'49	4°22'22	20°12'12	20°21'21	12°37'37	13°37'37	4°37'37	27°39'39	M 20
T 21	14 31 12	9°23'38	21°19'10	8°0'7	7°37'18	1°13'27	27°54'54	1°50'50	4°22'22	20°10'10	20°21'21	12°31'31	13°34'34	4°43'43	27°35'35	T 21
W 22	14 35 9	10°21'36	5°11'12	12°11'8	8°49'18	1°14'27	27°47'47	1°51'51	4°21'21	20°9'9	20°21'21	12°24'24	13°31'31	4°50'50	27°30'30	W 22
T 23	14 39 5	11°19'32	19°7'14	12°1'10	1°1'18	1°16'27	27°40'40	1°52'52	4°20'20	20°7'7	20°D 21	12°14'14	13°28'28	4°57'57	27°26'26	T 23
F 24	14 43 2	12°17'27	2°11'44	16°32'11	1°13'18	1°18'27	27°33'33	1°53'53	4°20'20	20°6'6	20°21'21	12°4'4	13°25'25	5°3'3	27°22'22	F 24
S 25	14 46 58	13°15'20	16°5'16	18°41'12	1°25'18	1°21'27	27°26'26	1°54'54	4°19'19	20°4'4	20°21'21	11°55'55	13°21'21	5°10'10	27°17'17	S 25
S 26	14 50 55	14°13'11	29°9'29	20°51'13	1°37'18	1°25'27	27°19'19	1°55'55	4°19'19	20°3'3	20°21'21	11°47'47	13°18'18	5°17'17	27°13'13	S 26
M 27	14 54 52	15°11'02	11°54'22	2°59'14	1°49'18	1°30'27	27°12'12	1°56'56	4°19'19	20°1'1	20°21'21	11°40'40	13°15'15	5°23'23	27°9'9	M 27
T 28	14 58 48	16°8'50	24°21'25	6°1'16	1°1'18	1°35'27	27°4'4	1°56'56	4°18'18	20°0'0	20°21'21	11°37'37	13°12'12	5°30'30	27°5'5	T 28
W 29	15 2 45	17°6'38	6°34'27	17°13'17	1°13'18	1°41'26	26°57'57	1°57'57	4°18'18	19°58'58	20°21'21	11°D 35	13°9'9	5°36'36	27°0'0	W 29
T 30	15 6 41	18°4'24	18°34'29	1°15'18	1°D 25	1°18'48	26°11'50	1°57'57	4°18'18	19°57'57	20°12'12	11°13'13	13°5'5	5°43'43	26°56'56	T 30

ASTRODIENST EPHEMERIS for the year 1461
geocentric

MAY 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	15 10 38	19♌ 2'09	0♌26	1♏17	19♏38	18♏55	26°R42	1♌57	4°R18	19°R56	20♌21	11♌36	13♌2	5♌50	26°R52	F 1
S 2	15 14 34	19°59'53	12°15	3°17	20°50	19° 3	26♏35	1°57	4♏18	19♌54	20°22	11°37	12°59	5°56	26♌48	S 2
S 3	15 18 31	20°57'36	24° 7	5°14	22° 2	19°12	26°27	1°R57	4°D18	19°53	20°22	11°R37	12°56	6° 3	26°44	S 3
M 4	15 22 27	21°55'17	6♌ 5	7° 9	23°14	19°21	26°20	1°57	4°18	19°52	20°22	11°36	12°53	6°10	26°41	M 4
T 5	15 26 24	22°52'58	18°16	9° 1	24°26	19°31	26°12	1°57	4°18	19°50	20°23	11°33	12°50	6°16	26°37	T 5
W 6	15 30 21	23°50'37	0♏44	10°50	25°39	19°41	26° 4	1°57	4°18	19°49	20°23	11°28	12°46	6°23	26°33	W 6
T 7	15 34 17	24°48'16	13°31	12°36	26°51	19°52	25°57	1°56	4°18	19°48	20°23	11°22	12°43	6°30	26°29	T 7
F 8	15 38 14	25°45'53	26°40	14°20	28° 3	20° 4	25°49	1°56	4°18	19°46	20°24	11°14	12°40	6°36	26°26	F 8
S 9	15 42 10	26°43'29	10♌11	16° 1	29°16	20°16	25°41	1°55	4°19	19°45	20°24	11° 7	12°37	6°43	26°22	S 9
S 10	15 46 7	27°41'04	24° 1	17°38	0♌28	20°29	25°34	1°55	4°19	19°44	20°25	11° 0	12°34	6°50	26°19	S 10
M 11	15 50 3	28°38'38	8♏ 7	19°13	1°40	20°42	25°26	1°54	4°19	19°43	20°25	10°55	12°30	6°56	26°15	M 11
T 12	15 54 0	29°36'11	22°25	20°44	2°53	20°56	25°18	1°53	4°20	19°42	20°26	10°52	12°27	7° 3	26°12	T 12
W 13	15 57 56	0♏33'43	6♌50	22°13	4° 5	21°11	25°11	1°52	4°20	19°40	20°26	10°D50	12°24	7°10	26° 9	W 13
T 14	16 1 53	1°31'14	21°15	23°38	5°18	21°26	25° 3	1°51	4°21	19°39	20°27	10°51	12°21	7°16	26° 5	T 14
F 15	16 5 50	2°28'43	5♏39	25° 0	6°30	21°41	24°56	1°50	4°21	19°38	20°28	10°52	12°18	7°23	26° 2	F 15
S 16	16 9 46	3°26'11	19°56	26°19	7°42	21°57	24°48	1°49	4°22	19°37	20°28	10°53	12°15	7°30	25°59	S 16
S 17	16 13 43	4°23'37	4♏ 5	27°34	8°55	22°14	24°41	1°48	4°23	19°36	20°29	10°R54	12°11	7°36	25°56	S 17
M 18	16 17 39	5°21'02	18° 5	28°46	10° 7	22°31	24°33	1°46	4°24	19°35	20°30	10°53	12° 8	7°43	25°54	M 18
T 19	16 21 36	6°18'26	1♌54	29°55	11°20	22°49	24°26	1°45	4°24	19°34	20°30	10°51	12° 5	7°50	25°51	T 19
W 20	16 25 32	7°15'49	15°32	1♌ 0	12°32	23° 7	24°19	1°43	4°25	19°33	20°31	10°47	12° 2	7°56	25°48	W 20
T 21	16 29 29	8°13'10	28°57	2° 2	13°45	23°25	24°11	1°42	4°26	19°32	20°32	10°43	11°59	8° 3	25°45	T 21
F 22	16 33 25	9°10'31	12♏ 8	3° 0	14°57	23°44	24° 4	1°40	4°27	19°31	20°33	10°38	11°56	8°10	25°43	F 22
S 23	16 37 22	10° 7'50	25° 6	3°55	16°10	24° 3	23°57	1°38	4°28	19°30	20°34	10°33	11°52	8°16	25°41	S 23
S 24	16 41 19	11° 5'09	7♌50	4°46	17°22	24°23	23°50	1°36	4°29	19°29	20°34	10°29	11°49	8°23	25°38	S 24
M 25	16 45 15	12° 2'27	20°19	5°33	18°35	24°43	23°43	1°34	4°30	19°28	20°35	10°26	11°46	8°30	25°36	M 25
T 26	16 49 12	12°59'45	2♌36	6°16	19°48	25° 4	23°36	1°32	4°32	19°28	20°36	10°24	11°43	8°36	25°34	T 26
W 27	16 53 8	13°57'01	14°41	6°55	21° 0	25°25	23°29	1°30	4°33	19°27	20°37	10°D24	11°40	8°43	25°32	W 27
T 28	16 57 5	14°54'18	26°38	7°30	22°13	25°46	23°23	1°27	4°34	19°26	20°38	10°25	11°36	8°50	25°30	T 28
F 29	17 1 1	15°51'33	8♌29	8° 0	23°26	26° 8	23°16	1°25	4°35	19°25	20°39	10°27	11°33	8°56	25°28	F 29
S 30	17 4 58	16°48'49	20°18	8°27	24°38	26°30	23°10	1°23	4°37	19°25	20°40	10°28	11°30	9° 3	25°26	S 30
S 31	17 8 54	17♏46'04	2♌10	8♌49	25♌51	26♏53	23♏ 3	1♌20	4♏38	19♌24	20♌41	10♌30	11♌27	9♌10	25♌25	S 31

Delta T = 06m09s

Julian Calendar 1 May 1461 == Greg. Calendar 10 May 1461

JUNE 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	17 12 51	18♏43'18	14♌ 8	9♌26	27♌ 4	27♏16	22°R57	1°R18	4♏40	19°R23	20♌42	10°R30	11♌24	9♌16	25°R22	M 1
T 2	17 16 48	19°40'33	26°19	9°19	28°16	27°39	22♏51	1♌15	4°41	19♌23	20°43	10♌30	11°21	9°23	25♌22	T 2
W 3	17 20 44	20°37'47	8♏47	9°28	29°29	28° 3	22°45	1°12	4°43	19°22	20°44	10°29	11°17	9°30	25°21	W 3
T 4	17 24 41	21°35'01	21°34	9°R32	0♏42	28°27	22°39	1° 9	4°45	19°21	20°46	10°28	11°14	9°36	25°19	T 4
F 5	17 28 37	22°32'14	4♌45	9°31	1°55	28°51	22°33	1° 6	4°46	19°21	20°47	10°25	11°11	9°43	25°18	F 5
S 6	17 32 34	23°29'28	18°21	9°26	3° 8	29°16	22°27	1° 3	4°48	19°20	20°48	10°23	11° 8	9°50	25°17	S 6
S 7	17 36 30	24°26'42	2♏21	9°16	4°21	29°41	22°22	1° 0	4°50	19°20	20°49	10°21	11° 5	9°56	25°16	S 7
M 8	17 40 27	25°23'55	16°43	9° 3	5°33	0♌ 6	22°16	0°57	4°52	19°19	20°50	10°20	11° 2	10° 3	25°15	M 8
T 9	17 44 23	26°21'08	1♌21	8°45	6°46	0°32	22°11	0°54	4°53	19°19	20°52	10°19	10°58	10°10	25°15	T 9
W 10	17 48 20	27°18'21	16° 8	8°23	7°59	0°58	22° 6	0°51	4°55	19°19	20°53	10°D19	10°55	10°16	25°14	W 10
T 11	17 52 17	28°15'34	0♌59	7°58	9°12	1°24	22° 1	0°47	4°57	19°18	20°54	10°19	10°52	10°23	25°14	T 11
F 12	17 56 13	29°12'46	15°45	7°29	10°25	1°51	21°56	0°44	4°59	19°18	20°56	10°20	10°49	10°30	25°13	F 12
S 13	18 0 10	0♌ 9'58	0♏20	6°58	11°38	2°18	21°52	0°41	5° 1	19°18	20°57	10°21	10°46	10°36	25°13	S 13
S 14	18 4 6	1° 7'09	14°41	6°25	12°51	2°45	21°47	0°37	5° 3	19°17	20°58	10°21	10°42	10°43	25°13	S 14
M 15	18 8 3	2° 4'20	28°44	5°50	14° 4	3°12	21°43	0°34	5° 6	19°17	21° 0	10°R22	10°39	10°50	25°D13	M 15
T 16	18 11 59	3° 1'30	12♌28	5°13	15°17	3°40	21°38	0°30	5° 8	19°17	21° 1	10°22	10°36	10°56	25°13	T 16
W 17	18 15 56	3°58'41	25°54	4°37	16°30	4° 8	21°34	0°26	5°10	19°17	21° 2	10°21	10°33	11° 3	25°13	W 17
T 18	18 19 52	4°55'50	9♏ 2	4° 0	17°43	4°36	21°31	0°22	5°12	19°17	21° 4	10°21	10°30	11°10	25°13	T 18
F 19	18 23 49	5°53'00	21°54	3°24	18°56	5° 5	21°27	0°19	5°14	19°16	21° 5	10°20	10°27	11°16	25°14	F 19
S 20	18 27 46	6°50'10	4♌31	2°49	20°10	5°34	21°23	0°15	5°17	19°16	21° 7	10°20	10°23	11°23	25°14	S 20
S 21	18 31 42	7°47'20	16°56	2°16	21°23	6° 3	21°20	0°11	5°19	19°16	21° 8	10°19	10°20	11°30	25°15	S 21
M 22	18 35 39	8°44'29	29°10	1°46	22°36	6°32	21°17	0° 7	5°22	19°D16	21°10	10°19	10°17	11°36	25°15	M 22
T 23	18 39 35	9°41'39	11♌15	1°19	23°49	7° 2	21°14	0° 3	5°24	19°16	21°11	10°D19	10°14	11°43	25°16	T 23
W 24	18 43 32	10°38'49	23°12	0°56	25° 2	7°32	21°11	29♌59	5°27	19°16	21°13	10°R19	10°11	11°50	25°17	W 24
T 25	18 47 28	11°36'00	5♌ 5	0°36	26°16	8° 2	21° 8	29°55	5°29	19°16	21°15	10°19	10° 8	11°56	25°18	T 25
F 26	18 51 25	12°33'10	16°54	0°21	27°29	8°32	21° 6	29°51	5°32	19°17	21°16	10°19	10° 4	12° 3	25°19	F 26
S 27	18 55 22	13°30'21	28°43	0°11	28°42	9° 3	21° 3	29°47	5°34	19°17	21°18	10°19	10° 1	12°10	25°21	S 27
S 28	18 59 18	14°27'33	10♌36	0° 5	29°55	9°34	21° 1	29°42	5°37	19°17	21°19	10°18	9°58	12°16	25°22	S 28
M 29	19 3 15	15°24'45	22°35	0°D 5	1♌ 9	10° 5	20°59	29°38	5°40	19°17	21°21	10°18	9°55	12°23	25°23	M 29
T 30	19 7 11	16♌21'58	4♏45	0♌10	2♌22	10♌36	20♏57	29♌34	5♏42	19♌17	21♌23	10♌17	9♌52	12♌30	25♌25	T 30

Delta T = 06m08s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1461
geocentric

JULY 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	19 11 8	17°19'11	17°11	0°21	3°36	11°7	20°R56	29°R30	5°45	19°18	21°12	10°D17	9°48	12°36	25°27	W 1
T 2	19 15 4	18°16'26	29°55	0°37	4°49	11°39	20°M54	29°Z25	5°48	19°18	21°26	10°E17	9°45	12°43	25°28	T 2
F 3	19 19 1	19°13'41	13°8	0°59	6°2	12°11	20°53	29°21	5°51	19°18	21°28	10°18	9°42	12°50	25°30	F 3
S 4	19 22 57	20°10'56	26°34	1°27	7°16	12°43	20°52	29°17	5°54	19°19	21°29	10°19	9°39	12°56	25°32	S 4
S 5	19 26 54	21°8'13	10°II33	2°0	8°29	13°15	20°51	29°12	5°57	19°19	21°31	10°19	9°36	13°3	25°34	S 5
M 6	19 30 51	22°5'31	24°57	2°39	9°43	13°48	20°50	29°8	6°0	19°20	21°33	10°20	9°33	13°10	25°37	M 6
T 7	19 34 47	23°2'49	9°E43	3°24	10°56	14°20	20°50	29°4	6°3	19°20	21°35	10°R20	9°29	13°16	25°39	T 7
W 8	19 38 44	24°0'08	24°44	4°14	12°10	14°53	20°49	28°59	6°6	19°21	21°36	10°20	9°26	13°23	25°41	W 8
T 9	19 42 40	24°57'28	9°L52	5°9	13°24	15°26	20°D49	28°55	6°9	19°21	21°38	10°19	9°23	13°30	25°44	T 9
F 10	19 46 37	25°54'48	24°58	6°10	14°37	16°0	20°49	28°50	6°12	19°22	21°40	10°18	9°20	13°36	25°46	F 10
S 11	19 50 33	26°52'09	9°M53	7°17	15°51	16°33	20°49	28°46	6°15	19°22	21°42	10°16	9°17	13°43	25°49	S 11
S 12	19 54 30	27°49'30	24°30	8°28	17°5	17°7	20°50	28°41	6°18	19°23	21°44	10°14	9°14	13°50	25°52	S 12
M13	19 58 26	28°46'52	8°L43	9°45	18°18	17°41	20°50	28°37	6°21	19°23	21°46	10°12	9°10	13°56	25°55	M13
T 14	20 2 23	29°44'14	22°31	11°6	19°32	18°15	20°51	28°33	6°24	19°24	21°47	10°11	9°7	14°3	25°58	T 14
W15	20 6 20	0°L41'37	5°M55	12°32	20°46	18°49	20°52	28°28	6°27	19°25	21°49	10°D11	9°4	14°10	26°1	W15
T 16	20 10 16	1°39'01	18°55	14°3	21°59	19°23	20°53	28°24	6°31	19°26	21°51	10°12	9°1	14°16	26°4	T 16
F 17	20 14 13	2°36'25	1°L36	15°38	23°13	19°58	20°54	28°19	6°34	19°26	21°53	10°13	8°58	14°23	26°7	F 17
S 18	20 18 9	3°33'50	14°0	17°18	24°27	20°33	20°56	28°15	6°37	19°27	21°55	10°15	8°54	14°30	26°11	S 18
S 19	20 22 6	4°31'16	26°12	19°1	25°41	21°8	20°57	28°10	6°41	19°28	21°57	10°16	8°51	14°36	26°14	S 19
M20	20 26 2	5°28'43	8°Z14	20°47	26°55	21°43	20°59	28°6	6°44	19°29	21°59	10°R17	8°48	14°43	26°18	M20
T 21	20 29 59	6°26'10	22°9	22°37	28°9	22°18	21°1	28°2	6°47	19°30	22°1	10°16	8°45	14°50	26°22	T 21
W22	20 33 55	7°23'39	2°0	24°30	29°23	22°54	21°4	27°57	6°51	19°31	22°2	10°15	8°42	14°56	26°25	W22
T 23	20 37 52	8°21'09	13°50	26°25	0°L36	23°29	21°6	27°53	6°54	19°32	22°4	10°12	8°39	15°3	26°29	T 23
F 24	20 41 49	9°18'39	25°39	28°22	1°50	24°5	21°8	27°49	6°57	19°33	22°6	10°7	8°35	15°10	26°33	F 24
S 25	20 45 45	10°16'11	7°L31	0°L21	3°4	24°41	21°11	27°44	7°1	19°34	22°8	10°2	8°32	15°16	26°37	S 25
S 26	20 49 42	11°13'45	19°28	2°22	4°18	25°17	21°14	27°40	7°4	19°35	22°10	9°57	8°29	15°23	26°41	S 26
M27	20 53 38	12°11'19	1°L31	4°23	5°32	25°53	21°17	27°36	7°8	19°36	22°12	9°52	8°26	15°30	26°46	M27
T 28	20 57 35	13°8'55	13°44	6°25	6°46	26°29	21°20	27°32	7°11	19°37	22°14	9°48	8°23	15°36	26°50	T 28
W29	21 1 31	14°6'33	26°10	8°27	8°1	27°6	21°24	27°27	7°15	19°38	22°16	9°45	8°20	15°43	26°54	W29
T 30	21 5 28	15°4'12	8°L51	10°30	9°15	27°43	21°27	27°23	7°18	19°39	22°18	9°43	8°16	15°50	26°59	T 30
F 31	21 9 24	16°L1'52	21°L53	12°L32	10°L29	28°L19	21°M31	27°Z19	7°M22	19°L41	22°L20	9°D43	8°E13	15°L56	27°L3	F 31

Delta T = 06m08s

Julian Calendar 1 July 1461 == Greg. Calendar 10 July 1461

AUGUST 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	21 13 21	16°L59'35	5°II18	14°L34	11°L43	28°L56	21°M35	27°R15	7°M26	19°L42	22°L22	9°E44	8°E10	16°L3	27°L8	S 1
S 2	21 17 18	17°57'19	19°7	16°35	12°57	29°34	21°39	27°Z11	7°29	19°43	22°24	9°46	8°7	16°10	27°13	S 2
M 3	21 21 14	18°55'05	3°E23	18°36	14°11	0°M11	21°43	27°7	7°33	19°44	22°26	9°R47	8°4	16°16	27°18	M 3
T 4	21 25 11	19°52'52	18°3	20°35	15°26	0°48	21°48	27°3	7°36	19°46	22°28	9°46	8°0	16°23	27°23	T 4
W 5	21 29 7	20°50'41	3°L3	22°34	16°40	1°26	21°52	26°59	7°40	19°47	22°30	9°45	7°57	16°30	27°28	W 5
T 6	21 33 4	21°48'32	18°15	24°31	17°54	2°3	21°57	26°55	7°44	19°48	22°32	9°41	7°54	16°36	27°33	T 6
F 7	21 37 0	22°46'24	3°M30	26°28	19°8	2°41	22°2	26°52	7°47	19°50	22°34	9°36	7°51	16°43	27°38	F 7
S 8	21 40 57	23°44'17	18°36	28°23	20°23	3°19	22°7	26°48	7°51	19°51	22°36	9°29	7°48	16°50	27°43	S 8
S 9	21 44 53	24°42'12	3°L26	0°M17	21°37	3°57	22°12	26°44	7°55	19°53	22°38	9°22	7°45	16°56	27°49	S 9
M10	21 48 50	25°40'08	17°51	2°9	22°51	4°36	22°18	26°41	7°58	19°54	22°40	9°17	7°41	17°3	27°54	M10
T 11	21 52 47	26°38'06	1°M47	4°1	24°6	5°14	22°23	26°37	8°2	19°55	22°42	9°12	7°38	17°10	27°59	T 11
W12	21 56 43	27°36'05	15°15	5°51	25°20	5°53	22°29	26°34	8°6	19°57	22°44	9°9	7°35	17°16	28°5	W12
T 13	22 0 40	28°34'05	28°15	7°40	26°34	6°31	22°35	26°30	8°10	19°59	22°45	9°D9	7°32	17°23	28°11	T 13
F 14	22 4 36	29°32'07	10°L53	9°27	27°49	7°10	22°41	26°27	8°13	20°0	22°47	9°9	7°29	17°30	28°16	F 14
S 15	22 8 33	0°M30'10	23°12	11°13	29°3	7°49	22°47	26°24	8°17	20°2	22°49	9°10	7°26	17°36	28°22	S 15
S 16	22 12 29	1°28'14	5°Z16	12°58	0°M18	8°28	22°53	26°20	8°21	20°3	22°51	9°R11	7°22	17°43	28°28	S 16
M17	22 16 26	2°26'20	17°12	14°42	1°32	9°7	23°0	26°17	8°25	20°5	22°53	9°11	7°19	17°50	28°34	M17
T 18	22 20 22	3°24'28	29°2	16°24	2°47	9°46	23°6	26°14	8°28	20°7	22°55	9°9	7°16	17°57	28°40	T 18
W19	22 24 19	4°22'37	10°L51	18°6	4°1	10°26	23°13	26°11	8°32	20°8	22°57	9°4	7°13	18°3	28°46	W19
T 20	22 28 16	5°20'47	22°40	19°46	5°16	11°5	23°20	26°8	8°36	20°10	22°59	8°57	7°10	18°10	28°52	T 20
F 21	22 32 12	6°19'00	4°L33	21°25	6°30	11°45	23°27	26°5	8°40	20°12	23°1	8°48	7°6	18°17	28°58	F 21
S 22	22 36 9	7°17'14	16°32	23°2	7°45	12°25	23°34	26°2	8°43	20°13	23°3	8°38	7°3	18°23	29°5	S 22
S 23	22 40 5	8°15'30	28°36	24°39	8°59	13°4	23°41	26°0	8°47	20°15	23°5	8°27	7°0	18°30	29°11	S 23
M24	22 44 2	9°13'48	10°L49	26°14	10°14	13°44	23°49	25°57	8°51	20°17	23°7	8°16	6°57	18°37	29°17	M24
T 25	22 47 58	10°12'08	23°10	27°49	11°29	14°25	23°56	25°55	8°55	20°19	23°9	8°6	6°54	18°43	29°24	T 25
W26	22 51 55	11°10'29	5°L43	29°22	12°43	15°5	24°4	25°52	8°58	20°21	23°11	7°59	6°51	18°50	29°30	W26
T 27	22 55 51	12°8'54	18°28	0°L54	13°58	15°45	24°12	25°50	9°2	20°22	23°13	7°54	6°47	18°57	29°37	T 27
F 28	22 59 48	13°7'20	1°II29	2°25	15°12	16°25	24°20	25°47	9°6	20°24	23°14	7°51	6°44	19°3	29°44	F 28
S 29	23 3 44	14°5'48	14°48	3°55	16°27	17°6	24°28	25°45	9°10	20°26	23°16	7°D51	6°41	19°10	29°50	S 29
S 30	23 7 41	15°4'19	28°28	5°23	17°42	17°47	24°36	25°43	9°14	20°28	23°18	7°51	6°38	19°17	29°57	S 30
M31	23 11 38	16°M2'52	12°E31	6°L51	18°M56	18°M27	24°M44	25°Z41	9°M17	20°L30	23°L20	7°R51	6°E35	19°L23	0°M4	M31

Delta T = 06m08s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1461

geocentric

SEPTEMBER 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	23 15 34	17 ¹⁷ 1'27	26 ⁵⁶ 56	8 ¹⁷ 17	20 ¹¹ 11	19 ¹⁸ 8	24 ¹⁵ 53	25 ¹⁰ 39	9 ²¹ 21	20 ³² 32	23 ²² 22	7 ¹⁰ 50	6 ³¹ 31	19 ³⁰ 30	0 ¹¹ 11	T 1
W 2	23 19 31	18 ⁰ 0'05	11 ⁴² 42	9 ⁴³ 43	21 ²⁶ 26	19 ⁴⁹ 49	25 ¹ 1	25 ³⁷ 37	9 ²⁵ 25	20 ³⁴ 34	23 ²⁴ 24	7 ⁴⁶ 46	6 ²⁸ 28	19 ³⁷ 37	0 ¹⁸ 18	W 2
T 3	23 23 27	18 ⁵⁸ 44	26 ⁴² 42	11 ⁷ 7	22 ⁴¹ 41	20 ³⁰ 30	25 ¹⁰ 10	25 ³⁵ 35	9 ²⁹ 29	20 ³⁶ 36	23 ²⁶ 26	7 ⁴⁰ 40	6 ²⁵ 25	19 ⁴³ 43	0 ²⁵ 25	T 3
F 4	23 27 24	19 ⁵⁷ 26	11 ⁴⁹ 49	12 ³⁰ 30	23 ⁵⁵ 55	21 ¹² 12	25 ¹⁹ 19	25 ³⁴ 34	9 ³² 32	20 ³⁸ 38	23 ²⁷ 27	7 ³¹ 31	6 ²² 22	19 ⁵⁰ 50	0 ³² 32	F 4
S 5	23 31 20	20 ⁵⁶ 09	26 ⁵³ 53	13 ⁵¹ 51	25 ¹⁰ 10	21 ⁵³ 53	25 ²⁸ 28	25 ³² 32	9 ³⁶ 36	20 ⁴⁰ 40	23 ²⁹ 29	7 ²¹ 21	6 ¹⁹ 19	19 ⁵⁷ 57	0 ³⁹ 39	S 5
S 6	23 35 17	21 ⁵⁴ 55	11 ⁴⁴ 44	15 ¹² 12	26 ²⁵ 25	22 ³⁴ 34	25 ³⁷ 37	25 ³¹ 31	9 ⁴⁰ 40	20 ⁴² 42	23 ³¹ 31	7 ¹⁰ 10	6 ¹⁶ 16	20 ³ 3	0 ⁴⁶ 46	S 6
M 7	23 39 13	22 ⁵³ 42	26 ¹³ 13	16 ³¹ 31	27 ⁴⁰ 40	23 ¹⁶ 16	25 ⁴⁶ 46	25 ²⁹ 29	9 ⁴³ 43	20 ⁴⁴ 44	23 ³³ 33	7 ⁰ 0	6 ¹² 12	20 ¹⁰ 10	0 ⁵³ 53	M 7
T 8	23 43 10	23 ⁵² 32	10 ¹⁵ 15	17 ⁴⁸ 48	28 ⁵⁴ 54	23 ⁵⁷ 57	25 ⁵⁵ 55	25 ²⁸ 28	9 ⁴⁷ 47	20 ⁴⁶ 46	23 ³⁴ 34	6 ⁵² 52	6 ⁹ 9	20 ¹⁷ 17	1 ⁰ 0	T 8
W 9	23 47 7	24 ⁵¹ 23	23 ⁴⁸ 48	19 ⁵ 5	0 ⁹ 9	24 ³⁹ 39	26 ⁵ 5	25 ²⁷ 27	9 ⁵¹ 51	20 ⁴⁸ 48	23 ³⁶ 36	6 ⁴⁶ 46	6 ⁶ 6	20 ²³ 23	1 ⁷ 7	W 9
T 10	23 51 3	25 ⁵⁰ 16	6 ⁵³ 53	20 ²⁰ 20	1 ²⁴ 24	25 ²¹ 21	26 ¹⁴ 14	25 ²⁶ 26	9 ⁵⁴ 54	20 ⁵⁰ 50	23 ³⁸ 38	6 ⁴² 42	6 ³ 3	20 ³⁰ 30	1 ¹⁵ 15	T 10
F 11	23 55 0	26 ⁴⁹ 11	19 ³² 32	21 ³³ 33	2 ³⁹ 39	26 ³ 3	26 ²⁴ 24	25 ²⁴ 24	9 ⁵⁸ 58	20 ⁵² 52	23 ⁴⁰ 40	6 ⁴¹ 41	6 ⁰ 0	20 ³⁷ 37	1 ²² 22	F 11
S 12	23 58 56	27 ⁴⁸ 07	1 ³⁵ 51	22 ⁴⁴ 44	3 ⁵⁴ 54	26 ⁴⁵ 45	26 ³³ 33	25 ²⁴ 24	10 ² 2	20 ⁵⁴ 54	23 ⁴¹ 41	6 ⁴¹ 41	5 ⁵⁷ 57	20 ⁴⁴ 44	1 ³⁰ 30	S 12
S 13	0 2 53	28 ⁴⁷ 06	13 ⁵⁵ 55	23 ⁵⁴ 54	5 ⁹ 9	27 ²⁷ 27	26 ⁴³ 43	25 ²³ 23	10 ⁵ 5	20 ⁵⁶ 56	23 ⁴³ 43	6 ⁴¹ 41	5 ⁵³ 53	20 ⁵⁰ 50	1 ³⁷ 37	S 13
M14	0 6 49	29 ⁴⁶ 06	25 ⁴⁹ 49	25 ² 2	6 ²³ 23	28 ⁹ 9	26 ⁵³ 53	25 ²² 22	10 ⁹ 9	20 ⁵⁸ 58	23 ⁴⁵ 45	6 ⁴⁰ 40	5 ⁵⁰ 50	20 ⁵⁷ 57	1 ⁴⁵ 45	M14
T 15	0 10 46	0 ⁴⁵ 08	7 ³⁸ 38	26 ⁸ 8	7 ³⁸ 38	28 ⁵² 52	27 ³ 3	25 ²¹ 21	10 ¹³ 13	21 ⁰ 0	23 ⁴⁶ 46	6 ³⁷ 37	5 ⁴⁷ 47	21 ⁴ 4	1 ⁵² 52	T 15
W16	0 14 42	1 ⁴⁴ 11	19 ²⁷ 27	27 ¹¹ 11	8 ⁵³ 53	29 ³⁴ 34	27 ¹³ 13	25 ²¹ 21	10 ¹⁶ 16	21 ³ 3	23 ⁴⁸ 48	6 ³¹ 31	5 ⁴⁴ 44	21 ¹⁰ 10	2 ⁰ 0	W16
T 17	0 18 39	2 ⁴³ 17	1 ¹⁹ 19	28 ¹³ 13	10 ⁸ 8	0 ¹⁷ 17	27 ²⁴ 24	25 ²⁰ 20	10 ²⁰ 20	21 ⁵ 5	23 ⁵⁰ 50	6 ²² 22	5 ⁴¹ 41	21 ¹⁷ 17	2 ⁷ 7	T 17
F 18	0 22 36	3 ⁴² 24	13 ¹⁸ 18	29 ¹¹ 11	11 ²³ 23	0 ⁵⁹ 59	27 ³⁴ 34	25 ²⁰ 20	10 ²³ 23	21 ⁷ 7	23 ⁵¹ 51	6 ¹⁰ 10	5 ³⁷ 37	21 ²⁴ 24	2 ¹⁵ 15	F 18
S 19	0 26 32	4 ⁴¹ 34	25 ²⁵ 25	0 ¹¹ 11	12 ³⁸ 38	1 ⁴² 42	27 ⁴⁴ 44	25 ²⁰ 20	10 ²⁷ 27	21 ⁹ 9	23 ⁵³ 53	5 ⁵⁷ 57	5 ³⁴ 34	21 ³⁰ 30	2 ²³ 23	S 19
S 20	0 30 29	5 ⁴⁰ 45	7 ⁴¹ 41	1 ⁰ 0	13 ⁵² 52	2 ²⁵ 25	27 ⁵⁵ 55	25 ²⁰ 20	10 ³⁰ 30	21 ¹¹ 11	23 ⁵⁴ 54	5 ⁴³ 43	5 ³¹ 31	21 ³⁷ 37	2 ³⁰ 30	S 20
M21	0 34 25	6 ³⁹ 59	20 ⁸ 8	1 ⁵⁰ 50	15 ⁷ 7	3 ⁷ 7	28 ⁵ 5	25 ²⁰ 20	10 ³⁴ 34	21 ¹³ 13	23 ⁵⁶ 56	5 ²⁹ 29	5 ²⁸ 28	21 ⁴⁴ 44	2 ³⁸ 38	M21
T 22	0 38 22	7 ³⁹ 15	2 ⁴⁴ 44	2 ³⁶ 36	16 ²² 22	3 ⁵⁰ 50	28 ¹⁶ 16	25 ²⁰ 20	10 ³⁷ 37	21 ¹⁶ 16	23 ⁵⁷ 57	5 ¹⁷ 17	5 ²⁵ 25	21 ⁵⁰ 50	2 ⁴⁶ 46	T 22
W23	0 42 18	8 ³⁸ 33	15 ³² 32	3 ¹⁸ 18	17 ³⁷ 37	4 ³³ 33	28 ²⁷ 27	25 ²⁰ 20	10 ⁴¹ 41	21 ¹⁸ 18	23 ⁵⁹ 59	5 ⁷ 7	5 ²² 22	21 ⁵⁷ 57	2 ⁵⁴ 54	W23
T 24	0 46 15	9 ³⁷ 53	28 ³⁰ 30	3 ⁵⁶ 56	18 ⁵² 52	5 ¹⁷ 17	28 ³⁸ 38	25 ²⁰ 20	10 ⁴⁴ 44	21 ²⁰ 20	24 ⁰ 0	5 ¹ 1	5 ¹⁸ 18	22 ⁴ 4	3 ¹ 1	T 24
F 25	0 50 11	10 ³⁷ 15	11 ⁴⁰ 40	4 ²⁹ 29	20 ⁷ 7	6 ⁰ 0	28 ⁴⁹ 49	25 ²⁰ 20	10 ⁴⁸ 48	21 ²² 22	24 ² 2	4 ⁵⁷ 57	5 ¹⁵ 15	22 ¹⁰ 10	3 ⁹ 9	F 25
S 26	0 54 8	11 ³⁶ 40	25 ⁴ 4	4 ⁵⁷ 57	21 ²² 22	6 ⁴³ 43	29 ⁰ 0	25 ²¹ 21	10 ⁵¹ 51	21 ²⁴ 24	24 ³ 3	4 ⁵⁵ 55	5 ¹² 12	22 ¹⁷ 17	3 ¹⁷ 17	S 26
S 27	0 58 5	12 ³⁶ 08	8 ⁴² 42	5 ¹⁹ 19	22 ³⁷ 37	7 ²⁶ 26	29 ¹¹ 11	25 ²² 22	10 ⁵⁴ 54	21 ²⁷ 27	24 ⁵ 5	4 ⁵⁵ 55	5 ⁹ 9	22 ²⁴ 24	3 ²⁵ 25	S 27
M28	1 2 1	13 ³⁵ 37	22 ³⁶ 36	5 ³⁵ 35	23 ⁵¹ 51	8 ¹⁰ 10	29 ²² 22	25 ²² 22	10 ⁵⁸ 58	21 ²⁹ 29	24 ⁶ 6	4 ⁵⁵ 55	5 ⁶ 6	22 ³¹ 31	3 ³³ 33	M28
T 29	1 5 58	14 ³⁵ 10	6 ⁴⁶ 46	5 ⁴⁴ 44	25 ⁶ 6	8 ⁵³ 53	29 ³³ 33	25 ²³ 23	11 ⁰ 0	21 ³¹ 31	24 ⁸ 8	4 ⁵⁴ 54	5 ³ 3	22 ³⁷ 37	3 ⁴¹ 41	T 29
W30	1 9 54	15 ³⁴ 44	21 ¹² 12	5 ⁴⁷ 47	26 ²¹ 21	9 ⁵⁷ 57	29 ⁴⁵ 45	25 ²⁴ 24	11 ⁴ 4	21 ³³ 33	24 ⁹ 9	4 ⁵⁰ 50	4 ⁵⁹ 59	22 ⁴⁴ 44	3 ⁴⁹ 49	W30

Delta T = 06m08s

Julian Calendar 1 Sept. 1461 == Greg. Calendar 10 Sept. 1461

OCTOBER 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	1 13 51	16 ³⁴ 20	5 ¹⁷ 51	5 ¹⁰ R41	27 ³⁶ 36	10 ²¹ 21	29 ¹⁵ 56	25 ²⁵ 25	11 ¹⁷ 8	21 ³⁵ 35	24 ¹⁰ 10	4 ¹⁰ R44	4 ⁵⁶ 56	22 ⁵⁵ 51	3 ¹¹ 57	T 1
F 2	1 17 47	17 ³³ '59	20 ³⁶	5 ¹⁸ 28	28 ⁵¹	11 ⁴ 4	0 ⁸ 8	25 ²⁶	11 ¹¹	21 ³⁸	24 ¹²	4 ⁵⁴ 34	4 ⁵³	22 ⁵⁷	4 ⁵ 5	F 2
S 3	1 21 44	18 ³³ '40	5 ²¹	5 ⁶ 6	0 ¹¹ 6	11 ⁴⁸	0 ¹⁹	25 ²⁷	11 ¹⁴	21 ⁴⁰	24 ¹³	4 ²⁴	4 ⁵⁰	23 ⁴ 4	4 ¹³	S 3
S 4	1 25 40	19 ³³ '23	19 ⁵⁷	4 ³⁵	1 ²¹	12 ³²	0 ³¹	25 ²⁸	11 ¹⁷	21 ⁴²	24 ¹⁴	4 ¹²	4 ⁴⁷	23 ¹¹	4 ²¹	S 4
M 5	1 29 37	20 ³³ '09	4 ¹⁷ 17	3 ⁵⁵	2 ³⁶	13 ¹⁶	0 ⁴³	25 ³⁰	11 ²⁰	21 ⁴⁴	24 ¹⁵	4 ¹	4 ⁴³	23 ¹⁷	4 ²⁹	M 5
T 6	1 33 33	21 ³² '56	18 ¹⁵	3 ⁷ 7	3 ⁵¹	14 ⁰	0 ⁵⁵	25 ³¹	11 ²³	21 ⁴⁷	24 ¹⁷	3 ⁵²	4 ⁴⁰	23 ²⁴	4 ³⁸	T 6
W 7	1 37 30	22 ³² '45	1 ⁴⁷ 47	2 ¹⁰	5 ⁶ 6	14 ⁴⁵	1 ⁷ 7	25 ³³	11 ²⁶	21 ⁴⁹	24 ¹⁸	3 ⁴⁶	4 ³⁷	23 ³¹	4 ⁴⁶	W 7
T 8	1 41 27	23 ³² '36	14 ⁵³	1 ⁶ 6	6 ²¹	15 ²⁹	1 ¹⁸	25 ³⁴	11 ³⁰	21 ⁵¹	24 ¹⁹	3 ⁴²	4 ³⁴	23 ³⁷	4 ⁵⁴	T 8
F 9	1 45 23	24 ³² '28	27 ³⁵	29 ⁵⁶ 56	7 ³⁶	16 ¹³	1 ³¹	25 ³⁶	11 ³³	21 ⁵³	24 ²⁰	3 ⁴⁰	4 ³¹	23 ⁴⁴	5 ² 2	F 9
S 10	1 49 20	25 ³² '23	9 ³⁵ 57	28 ⁴²	8 ⁵¹	16 ⁵⁸	1 ⁴³	25 ³⁸	11 ³⁶	21 ⁵⁶	24 ²¹	3 ⁴⁰ D40	4 ²⁸	23 ⁵¹	5 ¹⁰	S 10
S 11	1 53 16	26 ³² '19	22 ³ 3	27 ²⁶	10 ⁵ 5	17 ⁴²	1 ⁵⁵	25 ⁴⁰	11 ³⁹	21 ⁵⁸	24 ²²	3 ⁴⁰ R41	4 ²⁴	23 ⁵⁷	5 ¹⁸	S 11
M12	1 57 13	27 ³² '17	3 ⁵⁸ 58	26 ⁹ 9	11 ²⁰	18 ²⁷	2 ⁷ 7	25 ⁴²	11 ⁴¹	22 ⁰ 0	24 ²⁴	3 ⁴⁰	4 ²¹	24 ⁴ 4	5 ²⁷	M12
T 13	2 1 9	28 ³² '16	15 ⁴⁸	24 ⁵⁵	12 ³⁵	19 ¹¹	2 ¹⁹	25 ⁴⁴	11 ⁴⁴	22 ² 2	24 ²⁵	3 ³⁹	4 ¹⁸	24 ¹¹	5 ³⁵	T 13
W14	2 5 6	29 ³² '17	27 ³⁸	23 ⁴⁵	13 ⁵⁰	19 ⁵⁶	2 ³²	25 ⁴⁶	11 ⁴⁷	22 ⁵ 5	24 ²⁶	3 ³⁵	4 ¹⁵	24 ¹⁸	5 ⁴³	W14
T 15	2 9 2	0 ¹¹ 33'20	9 ⁴³ 33	22 ⁴²	15 ⁵ 5	20 ⁴¹	2 ⁴⁴	25 ⁴⁹	11 ⁵⁰	22 ⁷ 7	24 ²⁷	3 ²⁸	4 ¹²	24 ²⁴	5 ⁵¹ 1	T 15
F 16	2 12 59	1 ³² '24	21 ³⁷	21 ⁴⁸	16 ²⁰	21 ²⁶	2 ⁵⁷	25 ⁵¹	11 ⁵³	22 ⁹ 9	24 ²⁸	3 ²⁰	4 ⁸ 8	24 ³¹	6 ⁰ 0	F 16
S 17	2 16 56	2 ³² '30	3 ⁴⁵ 52	21 ³ 3	17 ³⁵	22 ¹⁰	3 ⁹ 9	25 ⁵⁴	11 ⁵⁵	22 ¹¹ 11	24 ²⁹	3 ⁹ 9	4 ⁵ 5	24 ³⁸	6 ⁸ 8	S 17
S 18	2 20 52	3 ³² '38	16 ²⁰	20 ³⁰	18 ⁵⁰	22 ⁵⁵	3 ²²	25 ⁵⁶	11 ⁵⁸	22 ¹³ 13	24 ³⁰	2 ⁵⁸	4 ² 2	24 ⁴⁴	6 ¹⁶ 16	S 18
M19	2 24 49	4 ³² '47	29 ² 2	20 ⁸ 8	20 ⁵ 5	23 ⁴⁰	3 ³⁴	25 ⁵⁹	12 ¹ 1	22 ¹⁶ 16	24 ³⁰	2 ⁴⁷	3 ⁵⁹	24 ⁵¹	6 ²⁴ 24	M19
T 20	2 28 45	5 ³² '59	11 ⁵⁸ 58	19 ⁵⁸ D58	21 ²⁰	24 ²⁶	3 ⁴⁷	26 ² 2	12 ³ 3	22 ¹⁸ 18	24 ³¹	2 ³⁷	3 ⁵⁶	24 ⁵⁸	6 ³³ 33	T 20
W21	2 32 42	6 ³³ '12	25 ⁷ 7	19 ⁵⁹	22 ³⁵	25 ¹¹ 11	4 ⁰ 0	26 ⁵ 5	12 ⁶ 6	22 ²⁰ 20	24 ³²	2 ²⁹	3 ⁵³	25 ⁴ 4	6 ⁴¹ 41	W21
T 22	2 36 38	7 ³³ '27	8 ¹¹ 27	20 ¹¹	23 ⁴⁹	25 ⁵⁶	4 ¹² 12	26 ⁸ 8	12 ⁹ 9	22 ²² 22	24 ³³	2 ²⁴	3 ⁴⁹	25 ¹¹ 11	6 ⁴⁹ 49	T 22
F 23	2 40 35	8 ³³ '44	21 ⁵⁸	20 ³⁴	25 ⁴ 4	26 ⁴¹	4 ²⁵	26 ¹¹ 11	12 ¹¹ 11	22 ²⁴ 24	24 ³⁴	2 ²²	3 ⁴⁶	25 ¹⁸ 18	6 ⁵⁷ 57	F 23
S 24	2 44 31	9 ³⁴ '04	5 ³⁸ 38	21 ⁵ 5	26 ¹⁹	27 ²⁶	4 ³⁸	26 ¹⁴ 14	12 ¹³ 13	22 ²⁷ 27	24 ³⁴	2 ⁴⁰ D21	3 ⁴³	25 ²⁴ 24	7 ⁶ 6	S 24
S 25	2 48 28	10 ³⁴ '25	19 ²⁶	21 ⁴⁶	27 ³⁴	28 ¹² 12	4 ⁵¹	26 ¹⁷ 17	12 ¹⁶ 16	22 ²⁹ 29	24 ³⁵	2 ²²	3 ⁴⁰	25 ³¹ 31	7 ¹⁴ 14	S 25
M26	2 52 25	11 ³⁴ '48	3 ¹¹ 23	22 ³⁴	28 ⁴⁹	28 ⁵⁷ 57	5 ⁴ 4	26 ²¹ 21	12 ¹⁸ 18	22 ³¹ 31	24 ³⁶	2 ²³	3 ³⁷	25 ³⁸ 38	7 ²² 22	M26
T 27	2 56 21	12 ³⁵ '13	17 ²⁸	23 ²⁸	0 ⁴ 4	29 ⁴³	5 ¹⁷ 17	26 ²⁴ 24	12 ²¹ 21	22 ³³ 33	24 ³⁷	2 ⁴⁰ R23	3 ³⁴	25 ⁴⁵ 45	7 ³⁰ 30	T 27
W28	3 0 18	13 ³⁵ '40	1 ¹⁷ 40	24 ²⁹	1 ¹⁹ 19	0 ²⁸ 28	5 ³⁰ 30	26 ²⁸ 28	12 ²³ 23	22 ³⁵ 35	24 ³⁷	2 ²²	3 ³⁰	25 ⁵¹ 51	7 ³⁸ 38	W28
T 29	3 4 14	14 ³⁶ '09	15 ⁵⁸	25 ³⁵	2 ³⁴ 34	1 ¹⁴ 14	5 ⁴³ 43	26 ³¹ 31	12 ²⁵ 25	22 ³⁷ 37	24 ³⁸	2 ¹⁸	3 ²⁷	25 ⁵⁸ 58	7 ⁴⁷ 47	T 29
F 30	3 8 11	15 ³⁶ '40	0 ¹⁷ 17	26 ⁴⁵	3 ⁴⁹ 49	2 ⁰ 0	5 ⁵⁶ 56	26 ³⁵ 35	12 ²⁷ 27	22 ³⁹ 39	24 ³⁸	2 ¹²	3 ²⁴	26 ⁵ 5	7 ⁵⁵ 55	F 30
S 31	3 12 7	16 ¹¹ 37'12	14 ³⁴ 34	27 ⁵⁹ 59	5 ⁴ 4	2 ³⁴ 5	6 ⁹ 9	26 ³⁹ 39	12 ²⁹ 29	22 ⁴² 42	24 ³⁹ 39	2 ⁵ 5	3 ²¹ 21	26 ¹¹ 11	8 ¹¹ 11	S 31

ASTRODIENST EPHEMERIS for the year 1461

geocentric

NOVEMBER 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	3 16 4	17 ¹¹ 37'47	28 ¹¹ 43	29 ¹¹ 16	6 ¹¹ 18	3 ¹¹ 31	6 ¹¹ 23	26 ¹¹ 42	12 ¹¹ 32	22 ¹¹ 44	24 ¹¹ 39	1 ¹¹ R58	3 ¹¹ 18	26 ¹¹ 18	8 ¹¹ 11	S 1
M 2	3 20 0	18 ¹¹ 38'23	12 ¹¹ 40	0 ¹¹ 37	7 ¹¹ 33	4 ¹¹ 17	6 ¹¹ 36	26 ¹¹ 46	12 ¹¹ 34	22 ¹¹ 46	24 ¹¹ 40	1 ¹¹ 50	3 ¹¹ 14	26 ¹¹ 25	8 ¹¹ 19	M 2
T 3	3 23 57	19 ¹¹ 39'00	26 ¹¹ 21	1 ¹¹ 59	8 ¹¹ 48	5 ¹¹ 3	6 ¹¹ 49	26 ¹¹ 50	12 ¹¹ 36	22 ¹¹ 48	24 ¹¹ 40	1 ¹¹ 44	3 ¹¹ 11	26 ¹¹ 31	8 ¹¹ 28	T 3
W 4	3 27 54	20 ¹¹ 39'39	9 ¹¹ 42	3 ¹¹ 24	10 ¹¹ 3	5 ¹¹ 49	7 ¹¹ 2	26 ¹¹ 55	12 ¹¹ 38	22 ¹¹ 50	24 ¹¹ 41	1 ¹¹ 40	3 ¹¹ 8	26 ¹¹ 38	8 ¹¹ 36	W 4
T 5	3 31 50	21 ¹¹ 40'20	22 ¹¹ 42	4 ¹¹ 50	11 ¹¹ 18	6 ¹¹ 35	7 ¹¹ 16	26 ¹¹ 59	12 ¹¹ 39	22 ¹¹ 52	24 ¹¹ 41	1 ¹¹ 38	3 ¹¹ 5	26 ¹¹ 45	8 ¹¹ 44	T 5
F 6	3 35 47	22 ¹¹ 41'02	5 ¹¹ 21	6 ¹¹ 17	12 ¹¹ 33	7 ¹¹ 21	7 ¹¹ 29	27 ¹¹ 3	12 ¹¹ 41	22 ¹¹ 54	24 ¹¹ 42	1 ¹¹ D38	3 ¹¹ 2	26 ¹¹ 51	8 ¹¹ 52	F 6
S 7	3 39 43	23 ¹¹ 41'45	17 ¹¹ 43	7 ¹¹ 46	13 ¹¹ 48	8 ¹¹ 7	7 ¹¹ 42	27 ¹¹ 7	12 ¹¹ 43	22 ¹¹ 56	24 ¹¹ 42	1 ¹¹ 39	2 ¹¹ 59	26 ¹¹ 58	9 ¹¹ 0	S 7
S 8	3 43 40	24 ¹¹ 42'29	29 ¹¹ 50	9 ¹¹ 15	15 ¹¹ 3	8 ¹¹ 53	7 ¹¹ 56	27 ¹¹ 12	12 ¹¹ 45	22 ¹¹ 58	24 ¹¹ 42	1 ¹¹ 40	2 ¹¹ 55	27 ¹¹ 5	9 ¹¹ 8	S 8
M 9	3 47 36	25 ¹¹ 43'15	11 ¹¹ 47	10 ¹¹ 46	16 ¹¹ 17	9 ¹¹ 39	8 ¹¹ 9	27 ¹¹ 16	12 ¹¹ 47	23 ¹¹ 0	24 ¹¹ 43	1 ¹¹ 42	2 ¹¹ 52	27 ¹¹ 12	9 ¹¹ 16	M 9
T 10	3 51 33	26 ¹¹ 44'01	23 ¹¹ 38	12 ¹¹ 17	17 ¹¹ 32	10 ¹¹ 25	8 ¹¹ 23	27 ¹¹ 21	12 ¹¹ 48	23 ¹¹ 2	24 ¹¹ 43	1 ¹¹ R43	2 ¹¹ 49	27 ¹¹ 18	9 ¹¹ 24	T 10
W 11	3 55 29	27 ¹¹ 44'48	5 ¹¹ 30	13 ¹¹ 48	18 ¹¹ 47	11 ¹¹ 12	8 ¹¹ 36	27 ¹¹ 26	12 ¹¹ 50	23 ¹¹ 4	24 ¹¹ 43	1 ¹¹ 43	2 ¹¹ 46	27 ¹¹ 25	9 ¹¹ 32	W 11
T 12	3 59 26	28 ¹¹ 45'37	17 ¹¹ 25	15 ¹¹ 20	20 ¹¹ 2	11 ¹¹ 58	8 ¹¹ 50	27 ¹¹ 30	12 ¹¹ 51	23 ¹¹ 6	24 ¹¹ 43	1 ¹¹ 41	2 ¹¹ 43	27 ¹¹ 32	9 ¹¹ 40	T 12
F 13	4 3 23	29 ¹¹ 46'26	29 ¹¹ 31	16 ¹¹ 52	21 ¹¹ 17	12 ¹¹ 44	9 ¹¹ 3	27 ¹¹ 35	12 ¹¹ 53	23 ¹¹ 8	24 ¹¹ 43	1 ¹¹ 37	2 ¹¹ 40	27 ¹¹ 38	9 ¹¹ 48	F 13
S 14	4 7 19	0 ¹¹ 47'16	11 ¹¹ 49	18 ¹¹ 25	22 ¹¹ 32	13 ¹¹ 31	9 ¹¹ 17	27 ¹¹ 40	12 ¹¹ 54	23 ¹¹ 9	24 ¹¹ 43	1 ¹¹ 33	2 ¹¹ 36	27 ¹¹ 45	9 ¹¹ 56	S 14
S 15	4 11 16	1 ¹¹ 48'07	24 ¹¹ 24	19 ¹¹ 58	23 ¹¹ 46	14 ¹¹ 17	9 ¹¹ 30	27 ¹¹ 45	12 ¹¹ 56	23 ¹¹ 11	24 ¹¹ 44	1 ¹¹ 28	2 ¹¹ 33	27 ¹¹ 52	10 ¹¹ 4	S 15
M 16	4 15 12	2 ¹¹ 48'59	7 ¹¹ 17	21 ¹¹ 31	25 ¹¹ 1	15 ¹¹ 4	9 ¹¹ 44	27 ¹¹ 50	12 ¹¹ 57	23 ¹¹ 13	24 ¹¹ 44	1 ¹¹ 23	2 ¹¹ 30	27 ¹¹ 58	10 ¹¹ 11	M 16
T 17	4 19 9	3 ¹¹ 49'53	20 ¹¹ 29	23 ¹¹ 4	26 ¹¹ 16	15 ¹¹ 50	9 ¹¹ 57	27 ¹¹ 55	12 ¹¹ 58	23 ¹¹ 15	24 ¹¹ 44	1 ¹¹ 18	2 ¹¹ 27	28 ¹¹ 5	10 ¹¹ 19	T 17
W 18	4 23 5	4 ¹¹ 50'47	3 ¹¹ 19	24 ¹¹ 37	27 ¹¹ 31	16 ¹¹ 37	10 ¹¹ 11	28 ¹¹ 0	13 ¹¹ 0	23 ¹¹ 17	24 ¹¹ R44	1 ¹¹ 15	2 ¹¹ 24	28 ¹¹ 12	10 ¹¹ 27	W 18
T 19	4 27 2	5 ¹¹ 51'42	17 ¹¹ 44	26 ¹¹ 10	28 ¹¹ 46	17 ¹¹ 23	10 ¹¹ 24	28 ¹¹ 5	13 ¹¹ 1	23 ¹¹ 18	24 ¹¹ 44	1 ¹¹ 13	2 ¹¹ 20	28 ¹¹ 19	10 ¹¹ 35	T 19
F 20	4 30 58	6 ¹¹ 52'39	1 ¹¹ 42	27 ¹¹ 43	0 ¹¹ 0	18 ¹¹ 10	10 ¹¹ 38	28 ¹¹ 11	13 ¹¹ 2	23 ¹¹ 20	24 ¹¹ 44	1 ¹¹ D12	2 ¹¹ 17	28 ¹¹ 25	10 ¹¹ 42	F 20
S 21	4 34 55	7 ¹¹ 53'37	15 ¹¹ 49	29 ¹¹ 17	1 ¹¹ 15	18 ¹¹ 56	10 ¹¹ 52	28 ¹¹ 16	13 ¹¹ 3	23 ¹¹ 22	24 ¹¹ 43	1 ¹¹ 13	2 ¹¹ 14	28 ¹¹ 32	10 ¹¹ 50	S 21
S 22	4 38 52	8 ¹¹ 54'35	0 ¹¹ 2	0 ¹¹ 50	2 ¹¹ 30	19 ¹¹ 43	11 ¹¹ 5	28 ¹¹ 21	13 ¹¹ 4	23 ¹¹ 24	24 ¹¹ 43	1 ¹¹ 14	2 ¹¹ 11	28 ¹¹ 39	10 ¹¹ 58	S 22
M 23	4 42 48	9 ¹¹ 55'35	14 ¹¹ 16	2 ¹¹ 24	3 ¹¹ 44	20 ¹¹ 30	11 ¹¹ 19	28 ¹¹ 27	13 ¹¹ 5	23 ¹¹ 25	24 ¹¹ 43	1 ¹¹ 16	2 ¹¹ 8	28 ¹¹ 45	11 ¹¹ 5	M 23
T 24	4 46 45	10 ¹¹ 56'36	28 ¹¹ 30	3 ¹¹ 57	4 ¹¹ 59	21 ¹¹ 16	11 ¹¹ 33	28 ¹¹ 32	13 ¹¹ 6	23 ¹¹ 27	24 ¹¹ 43	1 ¹¹ 17	2 ¹¹ 5	28 ¹¹ 52	11 ¹¹ 13	T 24
W 25	4 50 41	11 ¹¹ 57'38	12 ¹¹ 41	5 ¹¹ 31	6 ¹¹ 14	22 ¹¹ 3	11 ¹¹ 46	28 ¹¹ 38	13 ¹¹ 7	23 ¹¹ 29	24 ¹¹ 43	1 ¹¹ R17	2 ¹¹ 1	28 ¹¹ 59	11 ¹¹ 20	W 25
T 26	4 54 38	12 ¹¹ 58'41	26 ¹¹ 47	7 ¹¹ 5	7 ¹¹ 29	22 ¹¹ 50	12 ¹¹ 0	28 ¹¹ 44	13 ¹¹ 8	23 ¹¹ 30	24 ¹¹ 43	1 ¹¹ 17	1 ¹¹ 58	29 ¹¹ 5	11 ¹¹ 28	T 26
F 27	4 58 34	13 ¹¹ 59'46	10 ¹¹ 46	8 ¹¹ 38	8 ¹¹ 43	23 ¹¹ 37	12 ¹¹ 13	28 ¹¹ 49	13 ¹¹ 8	23 ¹¹ 32	24 ¹¹ 42	1 ¹¹ 15	1 ¹¹ 55	29 ¹¹ 12	11 ¹¹ 35	F 27
S 28	5 2 31	15 ¹¹ 0'51	24 ¹¹ 37	10 ¹¹ 12	9 ¹¹ 58	24 ¹¹ 23	12 ¹¹ 27	28 ¹¹ 55	13 ¹¹ 9	23 ¹¹ 33	24 ¹¹ 42	1 ¹¹ 13	1 ¹¹ 52	29 ¹¹ 19	11 ¹¹ 43	S 28
S 29	5 6 27	16 ¹¹ 1'57	8 ¹¹ 18	11 ¹¹ 46	11 ¹¹ 13	25 ¹¹ 10	12 ¹¹ 41	29 ¹¹ 1	13 ¹¹ 10	23 ¹¹ 35	24 ¹¹ 42	1 ¹¹ 11	1 ¹¹ 49	29 ¹¹ 26	11 ¹¹ 50	S 29
M 30	5 10 24	17 ¹¹ 3'04	21 ¹¹ 46	13 ¹¹ 20	12 ¹¹ 27	25 ¹¹ 27	12 ¹¹ 54	29 ¹¹ 7	13 ¹¹ 10	23 ¹¹ 37	24 ¹¹ 41	1 ¹¹ 9	1 ¹¹ 46	29 ¹¹ 32	11 ¹¹ 57	M 30

Delta T = 06m08s

Julian Calendar 1 Nov. 1461 == Greg. Calendar 10 Nov. 1461

DECEMBER 1461 JC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	5 14 21	18 ¹¹ 4'12	5 ¹¹ 1	14 ¹¹ 55	13 ¹¹ 42	26 ¹¹ 44	13 ¹¹ 8	29 ¹¹ 13	13 ¹¹ 11	23 ¹¹ 38	24 ¹¹ R41	1 ¹¹ R 7	1 ¹¹ 42	29 ¹¹ 39	12 ¹¹ 4	T 1
W 2	5 18 17	19 ¹¹ 5'21	18 ¹¹ 2	16 ¹¹ 29	14 ¹¹ 57	27 ¹¹ 31	13 ¹¹ 22	29 ¹¹ 19	13 ¹¹ 11	23 ¹¹ 39	24 ¹¹ 40	1 ¹¹ 5 6	1 ¹¹ 39	29 ¹¹ 46	12 ¹¹ 12	W 2
T 3	5 22 14	20 ¹¹ 6'30	0 ¹¹ 47	18 ¹¹ 3	16 ¹¹ 11	28 ¹¹ 18	13 ¹¹ 35	29 ¹¹ 25	13 ¹¹ 12	23 ¹¹ 41	24 ¹¹ 40	1 ¹¹ D 6	1 ¹¹ 36	29 ¹¹ 52	12 ¹¹ 19	T 3
F 4	5 26 10	21 ¹¹ 7'40	13 ¹¹ 17	19 ¹¹ 38	17 ¹¹ 26	29 ¹¹ 5	13 ¹¹ 49	29 ¹¹ 31	13 ¹¹ 12	23 ¹¹ 42	24 ¹¹ 40	1 ¹¹ 6	1 ¹¹ 33	29 ¹¹ 59	12 ¹¹ 26	F 4
S 5	5 30 7	22 ¹¹ 8'50	25 ¹¹ 34	21 ¹¹ 13	18 ¹¹ 40	29 ¹¹ 52	14 ¹¹ 2	29 ¹¹ 37	13 ¹¹ 12	23 ¹¹ 44	24 ¹¹ 39	1 ¹¹ 7	1 ¹¹ 30	0 ¹¹ 6	12 ¹¹ 33	S 5
S 6	5 34 3	23 ¹¹ 10'00	7 ¹¹ 40	22 ¹¹ 48	19 ¹¹ 55	0 ¹¹ 39	14 ¹¹ 16	29 ¹¹ 43	13 ¹¹ 12	23 ¹¹ 45	24 ¹¹ 39	1 ¹¹ 8	1 ¹¹ 26	0 ¹¹ 13	12 ¹¹ 40	S 6
M 7	5 38 0	24 ¹¹ 11'10	19 ¹¹ 36	24 ¹¹ 23	21 ¹¹ 9	1 ¹¹ 26	14 ¹¹ 29	29 ¹¹ 49	13 ¹¹ 13	23 ¹¹ 46	24 ¹¹ 38	1 ¹¹ 9	1 ¹¹ 23	0 ¹¹ 19	12 ¹¹ 47	M 7
T 8	5 41 57	25 ¹¹ 12'21	1 ¹¹ 28	25 ¹¹ 59	22 ¹¹ 24	2 ¹¹ 13	14 ¹¹ 43	29 ¹¹ 56	13 ¹¹ 13	23 ¹¹ 48	24 ¹¹ 37	1 ¹¹ 10	1 ¹¹ 20	0 ¹¹ 26	12 ¹¹ 54	T 8
W 9	5 45 53	26 ¹¹ 13'31	13 ¹¹ 19	27 ¹¹ 35	23 ¹¹ 39	3 ¹¹ 0	14 ¹¹ 57	0 ¹¹ 2	13 ¹¹ 13	23 ¹¹ 49	24 ¹¹ 37	1 ¹¹ 10	1 ¹¹ 17	0 ¹¹ 33	13 ¹¹ 0	W 9
T 10	5 49 50	27 ¹¹ 14'42	25 ¹¹ 13	29 ¹¹ 11	24 ¹¹ 53	3 ¹¹ 47	15 ¹¹ 10	0 ¹¹ 8	13 ¹¹ R13	23 ¹¹ 50	24 ¹¹ 36	1 ¹¹ R10	1 ¹¹ 14	0 ¹¹ 39	13 ¹¹ 7	T 10
F 11	5 53 46	28 ¹¹ 15'52	7 ¹¹ 17	0 ¹¹ 47	26 ¹¹ 7	4 ¹¹ 34	15 ¹¹ 24	0 ¹¹ 15	13 ¹¹ 13	23 ¹¹ 51	24 ¹¹ 35	1 ¹¹ 10	1 ¹¹ 11	0 ¹¹ 46	13 ¹¹ 14	F 11
S 12	5 57 43	29 ¹¹ 17'03	19 ¹¹ 33	2 ¹¹ 23	27 ¹¹ 22	5 ¹¹ 21	15 ¹¹ 37	0 ¹¹ 21	13 ¹¹ 13	23 ¹¹ 53	24 ¹¹ 35	1 ¹¹ 10	1 ¹¹ 7	0 ¹¹ 53	13 ¹¹ 20	S 12
S 13	6 1 39	0 ¹¹ 18'13	2 ¹¹ 7	4 ¹¹ 0	28 ¹¹ 36	6 ¹¹ 9	15 ¹¹ 50	0 ¹¹ 28	13 ¹¹ 12	23 ¹¹ 54	24 ¹¹ 34	1 ¹¹ 10	1 ¹¹ 4	0 ¹¹ 59	13 ¹¹ 27	S 13
M 14	6 5 36	1 ¹¹ 19'24	15 ¹¹ 2	5 ¹¹ 37	29 ¹¹ 51	6 ¹¹ 56	16 ¹¹ 4	0 ¹¹ 34	13 ¹¹ 12	23 ¹¹ 55	24 ¹¹ 33	1 ¹¹ D10	1 ¹¹ 1	1 ¹¹ 6	13 ¹¹ 33	M 14
T 15	6 9 32	2 ¹¹ 20'34	28 ¹¹ 20	7 ¹¹ 15	1 ¹¹ 5	7 ¹¹ 43	16 ¹¹ 17	0 ¹¹ 41	13 ¹¹ 12	23 ¹¹ 56	24 ¹¹ 32	1 ¹¹ 10	0 ¹¹ 58	1 ¹¹ 13	13 ¹¹ 40	T 15
W 16	6 13 29	3 ¹¹ 21'44	12 ¹¹ 11	8 ¹¹ 53	2 ¹¹ 19	8 ¹¹ 30	16 ¹¹ 31	0 ¹¹ 47	13 ¹¹ 12	23 ¹¹ 57	24 ¹¹ 32	1 ¹¹ 10	0 ¹¹ 55	1 ¹¹ 20	13 ¹¹ 46	W 16
T 17	6 17 26	4 ¹¹ 22'54	26 ¹¹ 5	10 ¹¹ 31	3 ¹¹ 34	9 ¹¹ 17	16 ¹¹ 44	0 ¹¹ 54	13 ¹¹ 11	23 ¹¹ 58	24 ¹¹ 31	1 ¹¹ R10	0 ¹¹ 52	1 ¹¹ 26	13 ¹¹ 52	T 17
F 18	6 21 22	5 ¹¹ 24'04	10 ¹¹ 28	12 ¹¹ 9	4 ¹¹ 48	10 ¹¹ 4	16 ¹¹ 57	1 ¹¹ 1	13 ¹¹ 11	23 ¹¹ 59	24 ¹¹ 30	1 ¹¹ 10	0 ¹¹ 48	1 ¹¹ 33	13 ¹¹ 59	F 18
S 19	6 25 19	6 ¹¹ 25'14	25 ¹¹ 4	13 ¹¹ 47	6 ¹¹ 2	10 ¹¹ 51	17 ¹¹ 11	1 ¹¹ 7	13 ¹¹ 10	24 ¹¹ 0	24 ¹¹ 29	1 ¹¹ 10	0 ¹¹ 45	1 ¹¹ 40	14 ¹¹ 5	S 19
S 20	6 29 15	7 ¹¹ 26'24	9 ¹¹ 46	15 ¹¹ 26	7 ¹¹ 16	11 ¹¹ 39	17 ¹¹ 24	1 ¹¹ 14	13 ¹¹ 10	24 ¹¹ 1	24 ¹¹ 28	1 ¹¹ 9	0 ¹¹ 42	1 ¹¹ 46	14 ¹¹ 11	S 20
M 21	6 33 12	8 ¹¹ 27'34	24 ¹¹ 29	17 ¹¹ 5	8 ¹¹ 30	12 ¹¹ 26	17 ¹¹ 37	1 ¹¹ 21	13 ¹¹ 9	24 ¹¹ 2	24 ¹¹ 27	1 ¹¹ 8	0 ¹¹ 39	1 ¹¹ 53	14 ¹¹ 17	M 21
T 22	6 37 8	9 ¹¹ 28'44	9 ¹¹ 11	18 ¹¹ 44	9 ¹¹ 45	13 ¹¹ 13	17 ¹¹ 50	1 ¹¹ 28	13 ¹¹ 8	24 ¹¹ 3	24 ¹¹ 26	1 ¹¹ 7	0 ¹¹ 36	2 ¹¹ 0	14 ¹¹ 23	T 22
W 23	6 41 5	10 ¹¹ 29'54	23 ¹¹ 29	20 ¹¹ 24	10 ¹¹ 59	14 ¹¹ 0	18 ¹¹ 4	1 ¹¹ 35	13 ¹¹ 8	24 ¹¹ 4	24 ¹¹ 25	1 ¹¹ 7	0 ¹¹ 32	2 ¹¹ 6	14 ¹¹ 29	W 23
T 24	6 45 1	11 ¹¹ 31'04	7 ¹¹ 39	22 ¹¹ 3	12 ¹¹ 13	14 ¹¹ 47	18 ¹¹ 17	1 ¹¹ 41	13 ¹¹ 7	24 ¹¹ 4	24 ¹¹ 24	1 ¹¹ D 6	0 ¹¹ 29	2 ¹¹ 13	14 ¹¹ 34	T 24
F 25	6 48 58	12 ¹¹ 32'14	21 ¹¹ 31	23 ¹¹ 42	13 ¹¹ 27	15 ¹¹ 34	18 ¹¹ 30	1 ¹¹ 48	13 ¹¹ 6	24 ¹¹ 5	24 ¹¹ 23	1 ¹¹ 6	0 ¹¹ 26	2 ¹¹ 20	14 ¹¹ 40	F 25
S 26	6 52 55	13 ¹¹ 33'24	5 ¹¹ 11	25 ¹¹ 22	14 ¹¹ 41	16 ¹¹ 21	18 ¹¹ 43	1 ¹¹ 55	13 ¹¹ 5	24 ¹¹ 6	24 ¹¹ 22	1 ¹¹ 7	0 ¹¹ 23	2 ¹¹ 27	14 ¹¹ 46	S 26
S 27	6 56 51	14 ¹¹ 34'34	18 ¹¹ 27	27 ¹¹ 1	15 ¹¹ 55	17 ¹¹ 9	18 ¹¹ 56	2 ¹¹ 2	13 ¹¹ 4	24 ¹¹ 7	24 ¹¹ 21	1 ¹¹ 8	0 ¹¹ 20	2 ¹¹ 33	14 ¹¹ 51	S 27
M 28	7 0 48	15 ¹¹ 35'44	1 ¹¹ 31	28 ¹¹ 40	17 ¹¹ 9	17 ¹¹ 56	19 ¹¹ 9	2 ¹¹ 9	13 ¹¹ 3	24 ¹¹ 7	24 ¹¹ 20	1 ¹¹ 9	0 ¹¹ 17	2 ¹¹ 40	14 ¹¹ 57	M 28
T 29	7 4 44	16 ¹¹ 36'53	14 ¹¹ 22	0 ¹¹ 18	18 ¹¹ 23	18 ¹¹ 43	19 ¹¹ 22	2 ¹¹ 16	13 ¹¹ 2	24 ¹¹ 8	24 ¹¹ 19	1 ¹¹ 11	0 ¹¹ 13	2 ¹¹ 47	15 ¹¹ 2	T 29
W 30	7 8 41	17 ¹¹ 38'03	27 ¹¹ 0	1 ¹¹ 55	19 ¹¹ 37	19 ¹¹ 30	19 ¹¹ 35	2 ¹¹ 23	13 ¹¹ 1	24 ¹¹ 9	24 ¹¹ 18	1 ¹¹ R11	0 ¹¹ 10	2 ¹¹ 53	15 ¹¹ 7	W 30
T 31	7 12 37	18 ¹¹ 39'12	9 ¹¹ 27	3 ¹¹ 32	20 ¹¹ 50	20 ¹¹ 17	19 ¹¹ 47	2 ¹¹ 30	13 ¹¹ 11	24 ¹¹ 11	24 ¹¹ 17	1 ¹¹ 11	0 ¹¹ 7	3 ¹¹ 0	15 ¹¹ 13	T 31