



Astrodienst Ephemeris Tables for the year 1421

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 1421
geocentric

JANUARY 1421 JC

00:00 UT

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

Delta T = 07m19s

Julian Calendar 1 Jan. 1421 == Greg. Calendar 10 Jan. 1421

FEBRUARY 1421 JC

00:00 UT

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

Delta T = 07m19s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1421

geocentric

MARCH 1421 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	11 8 55	19♈ 6'37	9♌12	2°R58	5♌ 4	26♈38	4♌44	26°R25	15♈ 9	21°R31	25♈ 2	10♈11	9♈56	21♈35	28♈16	S 1
S 2	11 12 52	20° 6'16	23°49	2♈33	6°12	27°14	4°46	26♈21	15°12	21♈31	25° 2	10°12	9°53	21°42	28°20	S 2
M 3	11 16 48	21° 5'53	8♈23	2°15	7°20	27°50	4°48	26°16	15°16	21°30	25° 2	10°R12	9°50	21°48	28°23	M 3
T 4	11 20 45	22° 5'28	22°47	2° 3	8°29	28°26	4°50	26°11	15°19	21°29	25° 2	10°12	9°47	21°55	28°27	T 4
W 5	11 24 41	23° 5'01	6♈56	1°57	9°37	29° 3	4°53	26° 7	15°23	21°29	25° 2	10°11	9°43	22° 2	28°30	W 5
T 6	11 28 38	24° 4'31	20°45	1°D57	10°46	29°39	4°55	26° 2	15°26	21°28	25° 2	10° 9	9°40	22° 8	28°34	T 6
F 7	11 32 35	25° 4'00	4♈12	2° 3	11°54	0♈15	4°58	25°57	15°30	21°28	25° 2	10° 7	9°37	22°15	28°37	F 7
S 8	11 36 31	26° 3'27	17°16	2°14	13° 3	0°52	5° 1	25°53	15°33	21°27	25° 2	10° 5	9°34	22°22	28°40	S 8
S 9	11 40 28	27° 2'51	29°59	2°30	14°12	1°28	5° 4	25°48	15°36	21°27	25° 3	10° 3	9°31	22°29	28°43	S 9
M10	11 44 24	28° 2'13	12♈23	2°52	15°21	2° 4	5° 8	25°43	15°40	21°26	25° 3	10° 2	9°28	22°35	28°47	M10
T 11	11 48 21	29° 1'32	24°31	3°18	16°30	2°41	5°11	25°38	15°43	21°26	25° 3	10°D 1	9°24	22°42	28°50	T 11
W12	11 52 17	0♈0'50	6♈29	3°49	17°40	3°17	5°15	25°34	15°46	21°25	25° 3	10° 1	9°21	22°49	28°53	W12
T 13	11 56 14	1° 0'04	18°20	4°24	18°49	3°54	5°19	25°29	15°50	21°25	25° 4	10° 2	9°18	22°55	28°56	T 13
F 14	12 0 10	1°59'17	0♈10	5° 3	19°58	4°30	5°23	25°24	15°53	21°24	25° 4	10° 3	9°15	23° 2	28°59	F 14
S 15	12 4 7	2°58'27	12° 4	5°46	21° 8	5° 7	5°27	25°20	15°56	21°24	25° 4	10° 5	9°12	23° 9	29° 2	S 15
S 16	12 8 4	3°57'35	24° 6	6°32	22°17	5°43	5°31	25°15	16° 0	21°24	25° 5	10° 7	9° 8	23°15	29° 5	S 16
M17	12 12 0	4°56'41	6♈18	7°22	23°27	6°20	5°36	25°11	16° 3	21°24	25° 5	10°R 7	9° 5	23°22	29° 7	M17
T 18	12 15 57	5°55'44	18°44	8°15	24°37	6°56	5°41	25° 6	16° 6	21°23	25° 5	10° 7	9° 2	23°29	29°10	T 18
W19	12 19 53	6°54'46	1♈26	9°11	25°46	7°33	5°46	25° 2	16°10	21°23	25° 6	10° 6	8°59	23°35	29°13	W19
T 20	12 23 50	7°53'45	14°24	10°10	26°56	8° 9	5°51	24°57	16°13	21°23	25° 6	10° 3	8°56	23°42	29°15	T 20
F 21	12 27 46	8°52'42	27°38	11°12	28° 6	8°46	5°56	24°53	16°16	21°23	25° 7	9°59	8°53	23°49	29°18	F 21
S 22	12 31 43	9°51'37	11♈ 7	12°16	29°16	9°22	6° 1	24°48	16°19	21°23	25° 7	9°54	8°49	23°55	29°21	S 22
S 23	12 35 39	10°50'31	24°49	13°23	0♈26	9°59	6° 7	24°44	16°23	21°23	25° 8	9°50	8°46	24° 2	29°23	S 23
M24	12 39 36	11°49'22	8♈41	14°32	1°36	10°35	6°12	24°39	16°26	21°D23	25° 8	9°45	8°43	24° 9	29°25	M24
T 25	12 43 33	12°48'12	22°41	15°44	2°47	11°12	6°18	24°35	16°29	21°23	25° 9	9°42	8°40	24°16	29°28	T 25
W26	12 47 29	13°47'00	6♈46	16°58	3°57	11°49	6°24	24°31	16°32	21°23	25° 9	9°41	8°37	24°22	29°30	W26
T 27	12 51 26	14°45'47	20°56	18°14	5° 7	12°25	6°30	24°26	16°35	21°23	25°10	9°D41	8°33	24°29	29°32	T 27
F 28	12 55 22	15°44'32	5♈ 8	19°32	6°18	13° 2	6°37	24°22	16°38	21°23	25°10	9°42	8°30	24°36	29°34	F 28
S 29	12 59 19	16°43'15	19°20	20°52	7°28	13°39	6°43	24°18	16°41	21°23	25°11	9°43	8°27	24°42	29°36	S 29
S 30	13 3 15	17°41'56	3♈31	22°14	8°39	14°15	6°50	24°14	16°44	21°23	25°12	9°R44	8°24	24°49	29°38	S 30
M31	13 7 12	18°40'35	17♈37	23♈37	9♈49	14♈52	6°56	24♈10	16♈47	21°24	25°12	9♈44	8♈21	24°56	29°40	M31

Delta T = 07m19s

Julian Calendar 1 March 1421 == Greg. Calendar 10 March 1421

APRIL 1421 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	13 11 8	19♈39'13	1♈35	25♈ 3	11♈ 0	15♈29	7♈ 3	24°R 6	16♈51	21°24	25°13	9°R42	8♈18	25♈ 2	29°42	T 1
W 2	13 15 5	20°37'49	15°22	26°31	12°10	16° 5	7°10	24°R 2	16°54	21°24	25°14	9♈39	8°14	25° 9	29°44	W 2
T 3	13 19 1	21°36'23	28°56	28° 0	13°21	16°42	7°17	23°58	16°56	21°24	25°15	9°33	8°11	25°16	29°45	T 3
F 4	13 22 58	22°34'55	12♈12	29°32	14°32	17°19	7°25	23°54	16°59	21°25	25°15	9°26	8° 8	25°22	29°47	F 4
S 5	13 26 55	23°33'25	25°11	1°Y 5	15°43	17°56	7°32	23°50	17° 2	21°25	25°16	9°18	8° 5	25°29	29°49	S 5
S 6	13 30 51	24°31'53	7♈15	2°39	16°54	18°33	7°40	23°47	17° 5	21°26	25°17	9°11	8° 2	25°36	29°50	S 6
M 7	13 34 48	25°30'19	20°15	4°16	18° 5	19° 9	7°47	23°43	17° 8	21°26	25°18	9° 4	7°59	25°42	29°52	M 7
T 8	13 38 44	26°28'42	2♈23	5°54	19°15	19°46	7°55	23°39	17°11	21°26	25°18	8°59	7°55	25°49	29°53	T 8
W 9	13 42 41	27°27'04	14°21	7°34	20°26	20°23	8° 3	23°36	17°14	21°27	25°19	8°56	7°52	25°56	29°54	W 9
T 10	13 46 37	28°25'24	26°13	9°16	21°37	21° 0	8°11	23°32	17°17	21°28	25°20	8°D55	7°49	26° 2	29°55	T 10
F 11	13 50 34	29°23'41	8♈ 3	10°59	22°48	21°37	8°19	23°29	17°19	21°28	25°21	8°56	7°46	26° 9	29°57	F 11
S 12	13 54 30	0♈21'56	19°57	12°45	24° 0	22°13	8°28	23°26	17°22	21°29	25°22	8°57	7°43	26°16	29°58	S 12
S 13	13 58 27	1°20'10	2♈ 0	14°32	25°11	22°50	8°36	23°23	17°25	21°29	25°23	8°58	7°39	26°22	29°59	S 13
M14	14 2 24	2°18'21	14°17	16°20	26°22	23°27	8°45	23°19	17°27	21°30	25°24	8°R58	7°36	26°29	29°59	M14
T 15	14 6 20	3°16'30	26°52	18°11	27°33	24° 4	8°53	23°16	17°30	21°31	25°25	8°56	7°33	26°36	0♈ 1	T 15
W16	14 10 17	4°14'38	9♈46	20° 3	28°44	24°41	9° 2	23°13	17°33	21°32	25°26	8°52	7°30	26°42	0° 1	W16
T 17	14 14 13	5°12'43	23° 2	21°58	29°55	25°18	9°11	23°11	17°35	21°32	25°27	8°46	7°27	26°49	0° 2	T 17
F 18	14 18 10	6°10'47	6♈39	23°53	1°Y 7	25°54	9°20	23° 8	17°38	21°33	25°28	8°38	7°24	26°56	0° 3	F 18
S 19	14 22 6	7° 8'49	20°35	25°51	2°18	26°31	9°29	23° 5	17°40	21°34	25°29	8°29	7°20	27° 3	0° 3	S 19
S 20	14 26 3	8° 6'50	4♈44	27°51	3°29	27° 8	9°39	23° 2	17°43	21°35	25°30	8°19	7°17	27° 9	0° 4	S 20
M21	14 29 59	9° 4'49	19° 1	29°52	4°41	27°45	9°48	23° 0	17°45	21°36	25°31	8°11	7°14	27°16	0° 4	M21
T 22	14 33 56	10° 2'47	3♈23	1♈54	5°52	28°22	9°57	22°57	17°48	21°37	25°32	8° 4	7°11	27°23	0° 5	T 22
W23	14 37 53	11° 0'43	17°43	3°59	7° 4	28°59	10° 7	22°55	17°50	21°38	25°33	8° 0	7° 8	27°29	0° 5	W23
T 24	14 41 49	11°58'38	1♈58	6° 4	8°15	29°36	10°17	22°53	17°52	21°39	25°34	7°58	7° 4	27°36	0° 5	T 24
F 25	14 45 46	12°56'32	16° 6	8°11	9°27	0♈13	10°26	22°51	17°55	21°40	25°35	7°D57	7° 1	27°43	0° 5	F 25
S 26	14 49 42	13°54'25	0♈ 6	10°20	10°38	0°50	10°36	22°49	17°57	21°41	25°36	7°58	6°58	27°49	0° 6	S 26
S 27	14 53 39	14°52'16	13°58	12°29	11°50	1°27	10°46	22°46	17°59	21°42	25°38	7°R58	6°55	27°56	0°R 6	S 27
M28	14 57 35	15°50'06	27°40	14°39	13° 2	2° 4	10°56	22°45	18° 1	21°43	25°39	7°56	6°52	28° 3	0° 5	M28
T 29	15 1 32	16°47'55	11♈13	16°50	14°13	2°40	11° 6	22°43	18° 4	21°44	25°40	7°52	6°49	28° 9	0° 5	T 29
W30	15 5 28	17°45'42	24♈36	19♈ 1	15°Y25	3♈17	11♈17	22♈41	18♈ 6	21°45	25°41	7♈46	6♈45	28°16	0♈ 5	W30

Delta T = 07m19s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1421

geocentric

MAY 1421 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	15 9 25	18♂43'28	7♂47	21♂12	16♂37	3♂54	11♂27	22°R39	18♂8	21♂46	25♂42	7°R36	6♂42	28♂23	0°R 5	T 1
F 2	15 13 22	19°41'13	20°46	23°23	17°48	4°31	11°37	22♂38	18°10	21°47	25°43	7♂25	6°39	28°29	0°≈ 5	F 2
S 3	15 17 18	20°38'57	3♂31	25°34	19° 0	5° 8	11°48	22°36	18°12	21°49	25°45	7°13	6°36	28°36	0° 4	S 3
S 4	15 21 15	21°36'39	16° 2	27°44	20°12	5°45	11°58	22°35	18°14	21°50	25°46	7° 0	6°33	28°43	0° 4	S 4
M 5	15 25 11	22°34'20	28°19	29°53	21°24	6°22	12° 9	22°34	18°16	21°51	25°47	6°49	6°30	28°49	0° 3	M 5
T 6	15 29 8	23°31'59	10♂24	2♂11	22°36	6°59	12°20	22°33	18°18	21°53	25°48	6°40	6°26	28°56	0° 3	T 6
W 7	15 33 4	24°29'37	22°19	4° 7	23°47	7°36	12°31	22°32	18°19	21°54	25°50	6°34	6°23	29° 3	0° 2	W 7
T 8	15 37 1	25°27'14	4♂9	6°12	24°59	8°13	12°42	22°31	18°21	21°55	25°51	6°30	6°20	29° 9	0° 1	T 8
F 9	15 40 57	26°24'49	15°58	8°15	26°11	8°50	12°53	22°30	18°23	21°57	25°52	6°28	6°17	29°16	0° 0	F 9
S 10	15 44 54	27°22'22	27°51	10°15	27°23	9°28	13° 4	22°29	18°25	21°58	25°54	6°D28	6°14	29°23	29♂59	S 10
S 11	15 48 51	28°19'54	9♂54	12°13	28°35	10° 5	13°15	22°29	18°26	22° 0	25°55	6°R28	6°10	29°29	29°59	S 11
M12	15 52 47	29°17'25	22°11	14° 9	29°47	10°42	13°26	22°28	18°28	22° 1	25°56	6°27	6° 7	29°36	29°57	M12
T 13	15 56 44	0♂14'54	4♂48	16° 3	0♂59	11°19	13°38	22°28	18°30	22° 3	25°58	6°25	6° 4	29°43	29°56	T 13
W14	16 0 40	1°12'22	17°49	17°54	2°11	11°56	13°49	22°27	18°31	22° 4	25°59	6°20	6° 1	29°49	29°55	W14
T 15	16 4 37	2° 9'49	1♂15	19°42	3°23	12°33	14° 0	22°27	18°33	22° 6	26° 0	6°13	5°58	29°56	29°54	T 15
F 16	16 8 33	3° 7'14	15° 7	21°28	4°35	13°10	14°12	22°27	18°34	22° 7	26° 2	6° 3	5°55	0♂3	29°53	F 16
S 17	16 12 30	4° 4'39	29°23	23°11	5°47	13°47	14°23	22°D27	18°35	22° 9	26° 3	5°52	5°51	0° 9	29°51	S 17
S 18	16 16 26	5° 2'03	13♂56	24°51	6°59	14°24	14°35	22°27	18°37	22°10	26° 4	5°41	5°48	0°16	29°50	S 18
M19	16 20 23	5°59'25	28°39	26°28	8°11	15° 1	14°47	22°27	18°38	22°12	26° 6	5°30	5°45	0°23	29°49	M19
T 20	16 24 20	6°56'47	13♂25	28° 3	9°24	15°38	14°59	22°27	18°39	22°14	26° 7	5°22	5°42	0°29	29°47	T 20
W21	16 28 16	7°54'09	28° 7	29°35	10°36	16°15	15°10	22°28	18°41	22°15	26° 9	5°16	5°39	0°36	29°45	W21
T 22	16 32 13	8°51'29	12♂37	1♂4	11°48	16°52	15°22	22°28	18°42	22°17	26°10	5°13	5°36	0°43	29°44	T 22
F 23	16 36 9	9°48'50	26°53	2°30	13° 0	17°30	15°34	22°29	18°43	22°19	26°11	5°12	5°32	0°49	29°42	F 23
S 24	16 40 6	10°46'09	10♂52	3°53	14°12	18° 7	15°46	22°30	18°44	22°21	26°13	5°12	5°29	0°56	29°40	S 24
S 25	16 44 2	11°43'28	24°36	5°13	15°25	18°44	15°58	22°30	18°45	22°22	26°14	5°12	5°26	1° 3	29°38	S 25
M26	16 47 59	12°40'47	8°Y 5	6°30	16°37	19°21	16°10	22°31	18°46	22°24	26°16	5°10	5°23	1° 9	29°37	M26
T 27	16 51 55	13°38'05	21°20	7°44	17°49	19°58	16°23	22°32	18°47	22°26	26°17	5° 6	5°20	1°16	29°35	T 27
W28	16 55 52	14°35'23	4♂23	8°56	19° 2	20°35	16°35	22°33	18°48	22°28	26°19	4°59	5°16	1°23	29°33	W28
T 29	16 59 49	15°32'41	17°14	10° 3	20°14	21°12	16°47	22°35	18°49	22°30	26°20	4°49	5°13	1°29	29°30	T 29
F 30	17 3 45	16°29'58	29°53	11° 8	21°27	21°50	16°59	22°36	18°50	22°32	26°21	4°37	5°10	1°36	29°28	F 30
S 31	17 7 42	17♂27'14	12♂22	12♂10	22♂39	22♂27	17♂12	22♂37	18♂50	22♂33	26♂23	4♂24	5♂7	1♂43	29♂26	S 31

Delta T = 07m19s

Julian Calendar 1 May 1421 == Greg. Calendar 10 May 1421

JUNE 1421 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	17 11 38	18♂24'30	24♂39	13♂8	23♂51	23♂4	17♂24	22♂39	18♂51	22♂35	26♂24	4°R12	5♂4	1♂49	29°R24	S 1
M 2	17 15 35	19°21'46	6♂46	14° 2	25° 4	23°41	17°37	22°40	18°52	22°37	26°26	4♂0	5° 1	1°56	29♂22	M 2
T 3	17 19 31	20°19'01	18°45	14°53	26°16	24°19	17°49	22°42	18°52	22°39	26°27	3°50	4°57	2° 3	29°19	T 3
W 4	17 23 28	21°16'16	0♂37	15°41	27°29	24°56	18° 2	22°44	18°53	22°41	26°29	3°43	4°54	2° 9	29°17	W 4
T 5	17 27 24	22°13'29	12°25	16°24	28°41	25°33	18°14	22°46	18°53	22°43	26°30	3°39	4°51	2°16	29°15	T 5
F 6	17 31 21	23°10'43	24°12	17° 4	29°54	26°10	18°27	22°48	18°54	22°45	26°32	3°37	4°48	2°23	29°12	F 6
S 7	17 35 18	24° 7'55	6♂4	17°40	1♂7	26°48	18°40	22°50	18°54	22°47	26°33	3°D37	4°45	2°29	29° 9	S 7
S 8	17 39 14	25° 5'08	18° 5	18°12	2°19	27°25	18°52	22°52	18°55	22°49	26°35	3°37	4°42	2°36	29° 7	S 8
M 9	17 43 11	26° 2'19	0♂21	18°39	3°32	28° 2	19° 5	22°54	18°55	22°51	26°36	3°R37	4°38	2°43	29° 4	M 9
T 10	17 47 7	26°59'30	12°56	19° 2	4°44	28°39	19°18	22°56	18°55	22°53	26°38	3°36	4°35	2°49	29° 2	T 10
W11	17 51 4	27°56'41	25°56	19°21	5°57	29°17	19°31	22°59	18°55	22°55	26°39	3°33	4°32	2°56	28°59	W11
T 12	17 55 0	28°53'51	9♂24	19°35	7°10	29°54	19°44	23° 1	18°56	22°57	26°40	3°27	4°29	3° 3	28°56	T 12
F 13	17 58 57	29°51'01	23°20	19°45	8°22	0♂31	19°56	23° 4	18°56	22°59	26°42	3°20	4°26	3° 9	28°53	F 13
S 14	18 2 53	0♂48'10	7♂44	19°50	9°35	1° 9	20° 9	23° 7	18°56	23° 1	26°43	3°11	4°22	3°16	28°51	S 14
S 15	18 6 50	1°45'20	22°30	19°R50	10°48	1°46	20°22	23°10	18°R56	23° 4	26°45	3° 2	4°19	3°23	28°48	S 15
M16	18 10 47	2°42'29	7♂31	19°46	12° 1	2°23	20°35	23°13	18°56	23° 6	26°46	2°53	4°16	3°29	28°45	M16
T 17	18 14 43	3°39'39	22°36	19°37	13°14	3° 1	20°48	23°16	18°56	23° 8	26°48	2°46	4°13	3°36	28°42	T 17
W18	18 18 40	4°36'48	7♂38	19°24	14°26	3°38	21° 1	23°19	18°56	23°10	26°49	2°42	4°10	3°43	28°39	W18
T 19	18 22 36	5°33'58	22°27	19° 6	15°39	4°16	21°14	23°22	18°56	23°12	26°51	2°40	4° 7	3°49	28°36	T 19
F 20	18 26 33	6°31'08	6♂57	18°44	16°52	4°53	21°27	23°25	18°55	23°14	26°52	2°D39	4° 3	3°56	28°33	F 20
S 21	18 30 29	7°28'18	21° 7	18°18	18° 5	5°30	21°40	23°28	18°55	23°16	26°54	2°40	4° 0	4° 3	28°30	S 21
S 22	18 34 26	8°25'29	4°Y54	17°49	19°18	6° 8	21°53	23°32	18°55	23°18	26°55	2°R41	3°57	4° 9	28°27	S 22
M23	18 38 22	9°22'40	18°20	17°17	20°31	6°45	22° 7	23°35	18°54	23°21	26°57	2°40	3°54	4°16	28°24	M23
T 24	18 42 19	10°19'52	1♂27	16°42	21°44	7°23	22°20	23°39	18°54	23°23	26°58	2°38	3°51	4°23	28°20	T 24
W25	18 46 16	11°17'04	14°17	16° 5	22°57	8° 0	22°33	23°43	18°54	23°25	26°59	2°34	3°48	4°29	28°17	W25
T 26	18 50 12	12°14'17	26°54	15°27	24°10	8°38	22°46	23°46	18°53	23°27	27° 1	2°28	3°44	4°36	28°14	T 26
F 27	18 54 9	13°11'30	9♂18	14°47	25°23	9°15	22°59	23°50	18°53	23°29	27° 2	2°20	3°41	4°43	28°11	F 27
S 28	18 58 5	14° 8'44	21°32	14° 8	26°36	9°53	23°13	23°54	18°52	23°32	27° 4	2°11	3°38	4°49	28° 7	S 28
S 29	19 2 2	15° 5'58	3♂37	13°29	27°50	10°30	23°26	23°58	18°51	23°34	27° 5	2° 3	3°35	4°56	28° 4	S 29
M30	19 5 58	16♂3'13	15♂35	12♂51	29♂11	11♂8	23♂39	24♂2	18♂51	23♂36	27♂11	1♂55	3♂32	5♂3	28♂1	M30

Delta T = 07m18s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1421
geocentric

JULY 1421 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	19 9 55	17°08'28	27°02'27	12°R15	0°05'16	11°04'45	23°05'52	24°06'18	18°R50	23°03'38	27°08'11	1°R48	3°02'28	5°09'16	27°R58	T 1
W 2	19 13 51	17°57'44	9°01'15	11°03'41	1°29'12	12°23'24	24°06'24	24°11'18	18°R49	23°40'27	27°09'11	1°04'44	3°25'32	5°16'27	27°R54	W 2
T 3	19 17 48	18°55'00	21°02'11	11°11'24	2°42'13	13°00'24	24°19'24	24°15'18	18°48'23	23°43'27	27°11'41	1°04'44	3°22'32	5°23'27	27°51'27	T 3
F 4	19 21 45	19°52'17	2°05'51	10°44'35	3°56'13	13°38'24	24°32'24	24°19'18	18°47'23	23°45'27	27°12'10	1°04'41	3°19'32	5°29'27	27°48'27	F 4
S 5	19 25 41	20°49'33	14°44'10	10°22'50	5°09'14	14°16'24	24°45'24	24°24'18	18°47'23	23°47'27	27°13'10	1°04'41	3°16'32	5°36'27	27°44'27	S 5
S 6	19 29 38	21°46'50	26°46'10	10°04'06	6°22'14	14°53'24	24°59'24	24°29'18	18°46'23	23°49'27	27°15'10	1°04'43	3°13'32	5°43'27	27°41'27	S 6
M 7	19 33 34	22°44'08	9°02'2	9°51'7	7°36'15	15°31'25	25°12'24	24°33'18	18°45'23	23°52'27	27°16'10	1°04'44	3°09'32	5°49'27	27°38'27	M 7
T 8	19 37 31	23°41'26	21°36'21	9°44'8	8°49'16	16°09'25	25°25'24	24°38'18	18°44'23	23°54'27	27°18'10	1°04'45	3°06'32	5°56'27	27°34'27	T 8
W 9	19 41 27	24°38'44	4°03'32	9°D42	10°03'16	16°46'25	25°39'24	24°43'18	18°42'23	23°56'27	27°19'10	1°04'44	3°03'32	6°03'27	27°31'27	W 9
T 10	19 45 24	25°36'03	17°55'9	9°46'11	11°16'17	17°24'25	25°52'24	24°47'18	18°41'23	23°58'27	27°20'10	1°04'43	3°00'32	6°09'27	27°27'27	T 10
F 11	19 49 20	26°33'23	1°07'46	9°57'12	12°30'18	18°02'26	26°05'24	24°52'18	18°40'24	24°00'27	27°21'10	1°03'39	2°57'32	6°16'27	27°24'27	F 11
S 12	19 53 17	27°30'43	16°06'10	10°13'13	13°43'18	18°39'26	26°18'24	24°57'18	18°39'24	24°03'27	27°23'10	1°03'35	2°54'32	6°23'27	27°21'27	S 12
S 13	19 57 14	28°28'03	0°03'50	10°35'14	14°57'19	19°17'26	26°32'25	25°02'18	18°38'24	24°05'27	27°24'10	1°03'30	2°50'32	6°29'27	27°17'27	S 13
M14	20 01 10	29°25'24	15°53'11	11°04'16	16°10'19	19°55'26	26°45'25	25°08'18	18°36'24	24°07'27	27°25'10	1°02'26	2°47'32	6°36'27	27°14'27	M14
T 15	20 05 07	0°02'22'46	1°06'11	11°39'17	17°24'20	20°33'26	26°58'25	25°13'18	18°35'24	24°09'27	27°27'10	1°02'22	2°44'32	6°43'27	27°10'27	T 15
W16	20 09 03	1°20'09	16°19'12	12°20'18	18°37'21	21°10'27	27°12'25	25°18'18	18°34'24	24°12'27	27°28'10	1°02'20	2°41'32	6°49'27	27°07'27	W16
T 17	20 13 00	2°17'33	1°02'22	13°07'19	19°51'21	21°48'27	27°25'25	25°23'18	18°32'24	24°14'27	27°29'10	1°01'19	2°38'32	6°56'27	27°04'27	T 17
F 18	20 16 56	3°14'58	16°08'14	14°01'21	21°50'22	22°26'27	27°38'25	25°29'18	18°31'24	24°16'27	27°30'10	1°01'20	2°34'32	7°03'27	27°00'27	F 18
S 19	20 20 53	4°12'24	0°07'30	15°00'22	22°18'23	23°04'27	27°51'25	25°34'18	18°29'24	24°18'27	27°32'10	1°01'21	2°31'32	7°09'27	26°57'27	S 19
S 20	20 24 49	5°09'52	14°27'16	16°05'23	23°32'23	24°02'28	28°05'25	25°40'18	18°28'24	24°20'27	27°33'10	1°01'23	2°28'32	7°16'27	26°54'27	S 20
M21	20 28 46	6°07'21	27°59'17	17°16'24	24°46'24	24°20'28	28°18'25	25°45'18	18°26'24	24°23'27	27°34'10	1°01'24	2°25'32	7°23'27	26°50'27	M21
T 22	20 32 43	7°04'51	11°06'18	18°32'26	26°00'24	24°58'28	28°31'25	25°51'18	18°25'24	24°25'27	27°35'10	1°01'24	2°22'32	7°29'27	26°47'27	T 22
W23	20 36 39	8°02'22	23°53'19	19°54'27	27°13'25	25°35'28	28°44'25	25°57'18	18°23'24	24°27'27	27°36'10	1°01'23	2°19'32	7°36'27	26°44'27	W23
T 24	20 40 36	8°59'56	6°02'32	21°20'28	28°27'26	26°13'29	28°57'26	26°02'18	18°21'24	24°29'27	27°38'10	1°01'21	2°15'32	7°43'27	26°40'27	T 24
F 25	20 44 32	9°57'30	18°38'22	22°52'29	24°21'26	26°51'29	29°11'26	26°08'18	18°20'24	24°31'27	27°39'10	1°01'18	2°12'32	7°49'27	26°37'27	F 25
S 26	20 48 29	10°55'06	0°04'42	24°28'00	24°55'27	27°29'29	29°24'26	26°14'18	18°18'24	24°33'27	27°40'10	1°01'15	2°09'32	7°56'27	26°34'27	S 26
S 27	20 52 25	11°52'43	12°39'26	26°08'02	2°09'28	28°07'29	29°37'26	26°20'18	18°16'24	24°36'27	27°41'10	1°01'12	2°06'32	8°03'27	26°31'27	S 27
M28	20 56 22	12°50'22	24°30'27	27°51'32	3°23'28	28°45'29	29°50'26	26°26'18	18°14'24	24°38'27	27°42'10	1°00'09	2°03'32	8°09'27	26°28'27	M28
T 29	21 00 18	13°48'02	6°01'18	29°38'43	4°37'29	29°23'00	30°03'26	26°32'18	18°13'24	24°40'27	27°43'10	1°00'07	1°59'32	8°16'27	26°24'27	T 29
W30	21 04 15	14°45'43	18°06'14	28°58'51	5°51'00	29°11'01	30°16'26	26°38'18	18°11'24	24°42'27	27°44'10	1°00'06	1°56'32	8°23'27	26°21'27	W30
T 31	21 08 12	15°03'26	29°02'55	3°02'21	7°01'25	29°40'00	30°29'26	26°44'18	18°09'24	24°44'27	27°45'10	1°00'05	1°53'32	8°29'27	26°18'27	T 31

Delta T = 07m18s Julian Calendar 1 July 1421 == Greg. Calendar 10 July 1421

AUGUST 1421 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	21 12 8	16♌41'09	11♎49	5♊16	8♏19	1♎18	0♌42	26♐50	18♍7	24♎46	27♐46	1♎6	1♎50	8♊36	26♍15	F 1
S 2	21 16 5	17°38'54	23°48	7°13	9°33	1°56	0°55	26°56	18♋5	24°48	27°47	1°6	1°47	8°43	26♎12	S 2
S 3	21 20 1	18°36'41	5♏57	9°11	10°47	2°34	1°8	27°3	18°3	24°50	27°48	1°7	1°44	8°49	26°9	S 3
M 4	21 23 58	19°34'28	18°18	11°10	12°1	3°12	1°21	27°9	18°1	24°52	27°49	1°9	1°40	8°56	26°6	M 4
T 5	21 27 54	20°32'17	0♎55	13°9	13°16	3°50	1°34	27°15	17°59	24°55	27°50	1°9	1°37	9°3	26°3	T 5
W 6	21 31 51	21°30'07	13°51	15°10	14°30	4°29	1°47	27°22	17°57	24°57	27°51	1°10	1°34	9°9	26°0	W 6
T 7	21 35 47	22°27'58	27°9	17°10	15°44	5°7	2°0	27°28	17°55	24°59	27°52	1♍10	1°31	9°16	25°57	T 7
F 8	21 39 44	23°25'51	10♌52	19°10	16°58	5°45	2°13	27°35	17°53	25°1	27°53	1°10	1°28	9°22	25°54	F 8
S 9	21 43 41	24°23'44	24°59	21°9	18°13	6°23	2°25	27°41	17°50	25°3	27°54	1°9	1°25	9°29	25°51	S 9
S 10	21 47 37	25°21'39	9♎30	23°8	19°27	7°2	2°38	27°48	17°48	25°5	27°55	1°8	1°21	9°36	25°49	S 10
M11	21 51 34	26°19'36	24°21	25°7	20°41	7°40	2°51	27°55	17°46	25°7	27°56	1°8	1°18	9°42	25°46	M11
T 12	21 55 30	27°17'34	9♏25	27°4	21°55	8°18	3°3	28°1	17°44	25°9	27°57	1°8	1°15	9°49	25°43	T 12
W13	21 59 27	28°15'33	24°34	29°1	23°10	8°57	3°16	28°8	17°42	25°10	27°57	1♎7	1°12	9°56	25°41	W13
T 14	22 3 23	29°13'34	9♋39	0♎57	24°24	9°35	3°29	28°15	17°40	25°12	27°58	1°7	1°9	10°2	25°38	T 14
F 15	22 7 20	0♎11'36	24°31	2°51	25°39	10°13	3°41	28°21	17°37	25°14	27°59	1°7	1°5	10°9	25°35	F 15
S 16	22 11 16	1°9'41	9♍3	4°45	26°53	10°52	3°54	28°28	17°35	25°16	28°0	1♍8	1°2	10°16	25°33	S 16
S 17	22 15 13	2°7'47	23°10	6°37	28°7	11°30	4°6	28°35	17°33	25°18	28°1	1°7	0°59	10°22	25°31	S 17
M18	22 19 10	3°5'55	6♌50	8°28	29°22	12°9	4°19	28°42	17°30	25°20	28°1	1°7	0°56	10°29	25°28	M18
T 19	22 23 6	4°4'06	20°4	10°18	0♎36	12°47	4°31	28°49	17°28	25°22	28°2	1°7	0°53	10°36	25°26	T 19
W20	22 27 3	5°2'18	2♏53	12°7	1°51	13°26	4°43	28°56	17°26	25°24	28°3	1♎7	0°50	10°42	25°23	W20
T 21	22 30 59	6°0'32	15°22	13°54	3°5	14°4	4°55	29°3	17°23	25°25	28°3	1°7	0°46	10°49	25°21	T 21
F 22	22 34 56	6°58'49	27°34	15°41	4°20	14°43	5°8	29°10	17°21	25°27	28°4	1°7	0°43	10°56	25°19	F 22
S 23	22 38 52	7°57'08	9♎34	17°26	5°35	15°22	5°20	29°17	17°19	25°29	28°5	1°8	0°40	11°2	25°17	S 23
S 24	22 42 49	8°55'28	21°27	19°10	6°49	16°0	5°32	29°24	17°16	25°31	28°5	1°9	0°37	11°9	25°15	S 24
M25	22 46 45	9°53'51	3♌15	20°53	8°4	16°39	5°44	29°31	17°14	25°32	28°6	1°10	0°34	11°16	25°13	M25
T 26	22 50 42	10°52'16	15°2	22°35	9°18	17°18	5°56	29°38	17°12	25°34	28°6	1°10	0°31	11°22	25°11	T 26
W27	22 54 39	11°50'42	26°53	24°16	10°33	17°56	6°8	29°45	17°9	25°36	28°7	1♍11	0°27	11°29	25°9	W27
T 28	22 58 35	12°49'11	8♎48	25°55	11°48	18°35	6°20	29°52	17°7	25°37	28°8	1°11	0°24	11°36	25°7	T 28
F 29	23 2 32	13°47'41	20°50	27°34	13°2	19°14	6°32	29°59	17°4	25°39	28°8	1°10	0°21	11°42	25°5	F 29
S 30	23 6 28	14°46'14	3♏2	29°11	14°17	19°53	6°43	0♏6	17°2	25°41	28°9	1°9	0°18	11°49	25°3	S 30
S 31	23 10 25	15♎44'48	15♏24	0♏48	15♎32	20♎32	6♏55	0♏14	17♋0	25♎42	28♐9	1♎7	0♎15	11♊56	25♎2	S 31

ASTRODIENST EPHEMERIS for the year 1421

geocentric

SEPTEMBER 1421 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	23 14 21	16 ^h 43'24"	27 ^h 59'	2 ^h 23'	16 ^h 47'	21 ^h 10'	7 ^h 7'	0 ^h 21'	16 ^h 57'	25 ^h 44'	28 ^h 11'	1 ^h 5'	0 ^h 11'	12 ^h 2'	25 ^h 0'	M 1
T 2	23 18 18	17 ^h 42'02"	10 ^h 47'	3 ^h 58'	18 ^h 1'	21 ^h 49'	7 ^h 18'	0 ^h 28'	16 ^h 55'	25 ^h 45'	28 ^h 10'	1 ^h 2'	0 ^h 8'	12 ^h 9'	24 ^h 59'	T 2
W 3	23 22 14	18 ^h 40'41"	23 ^h 50'	5 ^h 31'	19 ^h 16'	22 ^h 28'	7 ^h 30'	0 ^h 35'	16 ^h 52'	25 ^h 47'	28 ^h 10'	1 ^h 0'	0 ^h 5'	12 ^h 15'	24 ^h 57'	W 3
T 4	23 26 11	19 ^h 39'23"	7 ^h 10'	7 ^h 3'	20 ^h 31'	23 ^h 7'	7 ^h 41'	0 ^h 43'	16 ^h 50'	25 ^h 48'	28 ^h 11'	0 ^h 59'	0 ^h 2'	12 ^h 22'	24 ^h 56'	T 4
F 5	23 30 7	20 ^h 38'06"	20 ^h 48'	8 ^h 35'	21 ^h 46'	23 ^h 46'	7 ^h 52'	0 ^h 50'	16 ^h 47'	25 ^h 50'	28 ^h 11'	0 ^h 59'	29 ^h 59'	12 ^h 29'	24 ^h 54'	F 5
S 6	23 34 4	21 ^h 36'51"	4 ^h 44'	10 ^h 5'	23 ^h 0'	24 ^h 25'	8 ^h 4'	0 ^h 57'	16 ^h 45'	25 ^h 51'	28 ^h 11'	0 ^h 59'	29 ^h 56'	12 ^h 35'	24 ^h 53'	S 6
S 7	23 38 1	22 ^h 35'37"	18 ^h 58'	11 ^h 35'	24 ^h 15'	25 ^h 4'	8 ^h 15'	1 ^h 5'	16 ^h 43'	25 ^h 53'	28 ^h 12'	1 ^h 0'	29 ^h 52'	12 ^h 42'	24 ^h 52'	S 7
M 8	23 41 57	23 ^h 34'25"	3 ^h 29'	13 ^h 3'	25 ^h 30'	25 ^h 43'	8 ^h 26'	1 ^h 12'	16 ^h 40'	25 ^h 54'	28 ^h 12'	1 ^h 2'	29 ^h 49'	12 ^h 49'	24 ^h 51'	M 8
T 9	23 45 54	24 ^h 33'15"	18 ^h 12'	14 ^h 30'	26 ^h 45'	26 ^h 22'	8 ^h 37'	1 ^h 19'	16 ^h 38'	25 ^h 55'	28 ^h 12'	1 ^h 3'	29 ^h 46'	12 ^h 55'	24 ^h 49'	T 9
W10	23 49 50	25 ^h 32'07"	3 ^h 3'	15 ^h 57'	28 ^h 0'	27 ^h 1'	8 ^h 48'	1 ^h 26'	16 ^h 36'	25 ^h 57'	28 ^h 12'	1 ^h 3'	29 ^h 43'	13 ^h 2'	24 ^h 48'	W10
T 11	23 53 47	26 ^h 31'01"	17 ^h 54'	17 ^h 22'	29 ^h 14'	27 ^h 41'	8 ^h 59'	1 ^h 34'	16 ^h 33'	25 ^h 58'	28 ^h 13'	1 ^h 2'	29 ^h 40'	13 ^h 9'	24 ^h 47'	T 11
F 12	23 57 43	27 ^h 29'56"	2 ^h 38'	18 ^h 46'	0 ^h 29'	28 ^h 20'	9 ^h 9'	1 ^h 41'	16 ^h 31'	25 ^h 59'	28 ^h 13'	1 ^h 0'	29 ^h 36'	13 ^h 15'	24 ^h 47'	F 12
S 13	0 1 40	28 ^h 28'54"	17 ^h 7'	20 ^h 10'	1 ^h 44'	28 ^h 59'	9 ^h 20'	1 ^h 49'	16 ^h 28'	26 ^h 0'	28 ^h 13'	0 ^h 57'	29 ^h 33'	13 ^h 22'	24 ^h 46'	S 13
S 14	0 5 36	29 ^h 27'53"	1 ^h 16'	21 ^h 32'	2 ^h 59'	29 ^h 38'	9 ^h 31'	1 ^h 56'	16 ^h 26'	26 ^h 2'	28 ^h 13'	0 ^h 53'	29 ^h 30'	13 ^h 29'	24 ^h 45'	S 14
M15	0 9 33	0 ^h 26'56"	15 ^h 1'	22 ^h 53'	4 ^h 14'	0 ^h 17'	9 ^h 41'	2 ^h 3'	16 ^h 24'	26 ^h 3'	28 ^h 13'	0 ^h 48'	29 ^h 27'	13 ^h 35'	24 ^h 44'	M15
T 16	0 13 30	1 ^h 26'00"	28 ^h 19'	24 ^h 12'	5 ^h 29'	0 ^h 57'	9 ^h 52'	2 ^h 11'	16 ^h 21'	26 ^h 4'	28 ^h 13'	0 ^h 44'	29 ^h 24'	13 ^h 42'	24 ^h 44'	T 16
W17	0 17 26	2 ^h 25'07"	11 ^h 13'	25 ^h 31'	6 ^h 44'	1 ^h 36'	10 ^h 2'	2 ^h 18'	16 ^h 19'	26 ^h 5'	28 ^h 13'	0 ^h 41'	29 ^h 21'	13 ^h 49'	24 ^h 43'	W17
T 18	0 21 23	3 ^h 24'16"	23 ^h 45'	26 ^h 48'	7 ^h 59'	2 ^h 15'	10 ^h 12'	2 ^h 25'	16 ^h 17'	26 ^h 6'	28 ^h 13'	0 ^h 39'	29 ^h 17'	13 ^h 55'	24 ^h 43'	T 18
F 19	0 25 19	4 ^h 23'27"	5 ^h 58'	28 ^h 4'	9 ^h 14'	2 ^h 55'	10 ^h 22'	2 ^h 33'	16 ^h 15'	26 ^h 7'	28 ^h 14'	0 ^h 39'	29 ^h 14'	14 ^h 2'	24 ^h 42'	F 19
S 20	0 29 16	5 ^h 22'41"	17 ^h 58'	29 ^h 18'	10 ^h 29'	3 ^h 34'	10 ^h 33'	2 ^h 40'	16 ^h 12'	26 ^h 8'	28 ^h 14'	0 ^h 39'	29 ^h 11'	14 ^h 9'	24 ^h 42'	S 20
S 21	0 33 12	6 ^h 21'57"	29 ^h 49'	0 ^h 131'	11 ^h 44'	4 ^h 14'	10 ^h 42'	2 ^h 47'	16 ^h 10'	26 ^h 9'	28 ^h 14'	0 ^h 41'	29 ^h 8'	14 ^h 15'	24 ^h 42'	S 21
M22	0 37 9	7 ^h 21'15"	11 ^h 37'	1 ^h 42'	12 ^h 58'	4 ^h 53'	10 ^h 52'	2 ^h 55'	16 ^h 8'	26 ^h 10'	28 ^h 13'	0 ^h 43'	29 ^h 5'	14 ^h 22'	24 ^h 41'	M22
T 23	0 41 5	8 ^h 20'36"	23 ^h 25'	2 ^h 51'	14 ^h 13'	5 ^h 33'	11 ^h 2'	3 ^h 2'	16 ^h 6'	26 ^h 11'	28 ^h 13'	0 ^h 44'	29 ^h 2'	14 ^h 28'	24 ^h 41'	T 23
W24	0 45 2	9 ^h 19'59"	5 ^h 19'	3 ^h 59'	15 ^h 28'	6 ^h 12'	11 ^h 12'	3 ^h 9'	16 ^h 4'	26 ^h 12'	28 ^h 13'	0 ^h 44'	28 ^h 58'	14 ^h 35'	24 ^h 41'	W24
T 25	0 48 59	10 ^h 19'24"	17 ^h 22'	5 ^h 4'	16 ^h 43'	6 ^h 52'	11 ^h 21'	3 ^h 17'	16 ^h 2'	26 ^h 13'	28 ^h 13'	0 ^h 43'	28 ^h 55'	14 ^h 42'	24 ^h 41'	T 25
F 26	0 52 55	11 ^h 18'51"	29 ^h 36'	6 ^h 7'	17 ^h 58'	7 ^h 32'	11 ^h 31'	3 ^h 24'	15 ^h 59'	26 ^h 14'	28 ^h 13'	0 ^h 39'	28 ^h 52'	14 ^h 48'	24 ^h 41'	F 26
S 27	0 56 52	12 ^h 18'20"	12 ^h 3'	7 ^h 8'	19 ^h 13'	8 ^h 11'	11 ^h 40'	3 ^h 31'	15 ^h 57'	26 ^h 15'	28 ^h 13'	0 ^h 34'	28 ^h 49'	14 ^h 55'	24 ^h 41'	S 27
S 28	1 0 48	13 ^h 17'51"	24 ^h 44'	8 ^h 6'	20 ^h 28'	8 ^h 51'	11 ^h 49'	3 ^h 39'	15 ^h 55'	26 ^h 16'	28 ^h 13'	0 ^h 27'	28 ^h 46'	15 ^h 2'	24 ^h 42'	S 28
M29	1 4 45	14 ^h 17'25"	7 ^h 139'	9 ^h 1'	21 ^h 43'	9 ^h 31'	11 ^h 58'	3 ^h 46'	15 ^h 53'	26 ^h 16'	28 ^h 13'	0 ^h 19'	28 ^h 42'	15 ^h 8'	24 ^h 42'	M29
T 30	1 8 41	15 ^h 17'00"	20 ^h 148'	9 ^h 152'	22 ^h 58'	10 ^h 110'	12 ^h 7'	3 ^h 53'	15 ^h 51'	26 ^h 17'	28 ^h 12'	0 ^h 11'	28 ^h 39'	15 ^h 15'	24 ^h 42'	T 30

Delta T = 07m18s

Julian Calendar 1 Sept. 1421 == Greg. Calendar 10 Sept. 1421

OCTOBER 1421 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	1 12 38	16♌16'37	4♏ 9	10♍40	24♎13	10♎50	12♏16	4♎ 1	15°R49	26♏18	28°R12	0°R 4	28♏36	15♏22	24♏43	W 1
T 2	1 16 34	17°16'16	17°41	11°24	25°28	11°30	12°25	4° 8	15°H47	26°18	28♎12	29♏59	28°33	15°28	24°43	T 2
F 3	1 20 31	18°15'57	1♌24	12° 4	26°43	12°10	12°34	4°15	15°45	26°19	28°12	29°55	28°30	15°35	24°44	F 3
S 4	1 24 27	19°15'40	15°18	12°39	27°59	12°50	12°42	4°22	15°43	26°20	28°11	29°D54	28°27	15°42	24°45	S 4
S 5	1 28 24	20°15'24	29♏21	13° 8	29°14	13°30	12°51	4°29	15°42	26°20	28°11	29°54	28°23	15°48	24°45	S 5
M 6	1 32 21	21°15'10	13♎34	13°32	0♎29	14° 9	12°59	4°37	15°40	26°21	28°11	29°55	28°20	15°55	24°46	M 6
T 7	1 36 17	22°14'58	27°54	13°49	1°44	14°49	13° 7	4°44	15°38	26°21	28°10	29°R56	28°17	16° 2	24°47	T 7
W 8	1 40 14	23°14'47	12♏18	13°59	2°59	15°29	13°15	4°51	15°36	26°22	28°10	29°55	28°14	16° 8	24°48	W 8
T 9	1 44 10	24°14'38	26°44	14°R 1	4°14	16°10	13°23	4°58	15°34	26°22	28° 9	29°52	28°11	16°15	24°49	T 9
F 10	1 48 7	25°14'31	11♏ 7	13°56	5°29	16°50	13°31	5° 5	15°33	26°22	28° 9	29°47	28° 7	16°21	24°50	F 10
S 11	1 52 3	26°14'26	25°19	13°41	6°44	17°30	13°38	5°12	15°31	26°23	28° 8	29°39	28° 4	16°28	24°51	S 11
S 12	1 56 0	27°14'23	9♏17	13°18	7°59	18°10	13°46	5°19	15°29	26°23	28° 8	29°30	28° 1	16°35	24°52	S 12
M13	1 59 56	28°14'22	22°56	12°45	9°14	18°50	13°53	5°26	15°28	26°23	28° 7	29°20	27°58	16°41	24°54	M13
T 14	2 3 53	29°14'22	6♎13	12° 3	10°29	19°30	14° 0	5°33	15°26	26°24	28° 7	29°10	27°55	16°48	24°55	T 14
W15	2 7 50	0♎14'25	19° 7	11°12	11°44	20°10	14° 7	5°40	15°25	26°24	28° 6	29° 1	27°52	16°55	24°56	W15
T 16	2 11 46	1°14'30	1♏40	10°12	12°59	20°51	14°14	5°47	15°23	26°24	28° 6	28°55	27°48	17° 1	24°58	T 16
F 17	2 15 43	2°14'38	13°55	9° 5	14°14	21°31	14°21	5°54	15°22	26°24	28° 5	28°51	27°45	17° 8	24°59	F 17
S 18	2 19 39	3°14'47	25°55	7°52	15°29	22°11	14°28	6° 1	15°21	26°24	28° 5	28°49	27°42	17°15	25° 1	S 18
S 19	2 23 36	4°14'58	7♏46	6°35	16°44	22°52	14°34	6° 7	15°19	26°24	28° 4	28°D49	27°39	17°21	25° 3	S 19
M20	2 27 32	5°15'11	19°34	5°16	17°59	23°32	14°41	6°14	15°18	26°25	28° 3	28°49	27°36	17°28	25° 5	M20
T 21	2 31 29	6°15'27	1♏24	3°58	19°14	24°13	14°47	6°21	15°17	26°R25	28° 3	28°R49	27°33	17°35	25° 6	T 21
W22	2 35 25	7°15'44	13°20	2°43	20°29	24°53	14°53	6°28	15°15	26°25	28° 2	28°48	27°29	17°41	25° 8	W22
T 23	2 39 22	8°16'04	25°29	1°33	21°44	25°34	14°59	6°34	15°14	26°24	28° 1	28°45	27°26	17°48	25°10	T 23
F 24	2 43 19	9°16'25	7♎52	0°32	22°59	26°14	15° 4	6°41	15°13	26°24	28° 0	28°39	27°23	17°55	25°12	F 24
S 25	2 47 15	10°16'48	20°34	29♏39	24°14	26°55	15°10	6°47	15°12	26°24	28° 0	28°30	27°20	18° 1	25°14	S 25
S 26	2 51 12	11°17'13	3♎34	28°58	25°29	27°36	15°15	6°54	15°11	26°24	27°59	28°19	27°17	18° 8	25°17	S 26
M27	2 55 8	12°17'40	16°52	28°28	26°44	28°16	15°21	7° 0	15°10	26°24	27°58	28° 7	27°13	18°14	25°19	M27
T 28	2 59 5	13°18'08	0♏26	28° 9	27°59	28°57	15°26	7° 7	15° 9	26°24	27°57	27°54	27°10	18°21	25°21	T 28
W29	3 3 1	14°18'38	14°12	28°D 2	29°14	29°38	15°30	7°13	15° 8	26°23	27°57	27°43	27° 7	18°28	25°23	W29
T 30	3 6 58	15°19'10	28° 8	28° 7	0♏29	0♎19	15°35	7°20	15° 7	26°23	27°56	27°34	27° 4	18°34	25°26	T 30
F 31	3 10 54	16♎19'43	12♏ 9	28♎22	1♏45	0♎59	15♏40	7♎26	15°H 6	26♏23	27♎55	27♏27	27♏ 1	18♏41	25♏38	F 31

ASTRODIENST EPHEMERIS for the year 1421

geocentric

NOVEMBER 1421 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	3 14 51	17 ¹¹ 20'17	26 ³ 13	28 ⁴ 46	3 ³ 0	1 ¹¹ 40	15 ¹² 44	7 ¹² 32	15 ¹ R 6	26 ¹ R23	27 ¹ R54	27 ¹ R23	26 ¹ Ω58	18 ¹ Ω48	25 ¹ Ω31	S 1
S 2	3 18 48	18 ²⁰ 52	10 ¹¹ 18	29 ²⁰	4 ¹⁵	2 ²¹	15 ⁴⁸	7 ³⁸	15 ¹ 5	26 ¹ Ω22	27 ¹ II53	27 ¹ Ω22	26 ¹ 54	18 ¹ 54	25 ¹ 33	S 2
M 3	3 22 44	19 ²¹ 29	24 ²³	0 ¹¹ 1	5 ³⁰	3 ²	15 ⁵²	7 ⁴⁴	15 ¹ 4	26 ¹ 22	27 ¹ 52	27 ¹ 22	26 ¹ 51	19 ¹ 1	25 ¹ 36	M 3
T 4	3 26 41	20 ²² 07	8 ¹¹ 28	0 ⁵⁰	6 ⁴⁵	3 ⁴³	15 ⁵⁶	7 ⁵¹	15 ¹ 4	26 ¹ 21	27 ¹ 51	27 ¹ 22	26 ¹ 48	19 ¹ 8	25 ¹ 39	T 4
W 5	3 30 37	21 ²² 45	22 ³⁰	1 ⁴⁵	8 ⁰	4 ²⁴	16 ⁰	7 ⁵⁷	15 ¹ 3	26 ¹ 21	27 ¹ 50	27 ¹ 20	26 ¹ 45	19 ¹ 14	25 ¹ 42	W 5
T 6	3 34 34	22 ²³ 25	6 ¹ 30	2 ⁴⁵	9 ¹⁵	5 ⁵	16 ³	8 ³	15 ¹ 3	26 ¹ 20	27 ¹ 49	27 ¹ 16	26 ¹ 42	19 ¹ 21	25 ¹ 44	T 6
F 7	3 38 30	23 ²⁴ 06	20 ²⁵	3 ⁵⁰	10 ³⁰	5 ⁴⁶	16 ⁷	8 ⁸	15 ¹ 2	26 ¹ 20	27 ¹ 48	27 ¹ 8	26 ¹ 39	19 ¹ 28	25 ¹ 47	F 7
S 8	3 42 27	24 ²⁴ 49	4 ¹²	4 ⁵⁹	11 ⁴⁵	6 ²⁷	16 ¹⁰	8 ¹⁴	15 ¹ 2	26 ¹ 19	27 ¹ 48	26 ¹ 58	26 ¹ 35	19 ¹ 34	25 ¹ 50	S 8
S 9	3 46 23	25 ²⁵ 32	17 ⁴⁸	6 ¹¹	13 ⁰	7 ⁸	16 ¹³	8 ²⁰	15 ¹ 1	26 ¹ 18	27 ¹ 47	26 ¹ 46	26 ¹ 32	19 ¹ 41	25 ¹ 53	S 9
M10	3 50 20	26 ²⁶ 17	1 ¹¹ 10	7 ²⁷	14 ¹⁵	7 ⁵⁰	16 ¹⁶	8 ²⁶	15 ¹ 1	26 ¹ 18	27 ¹ 46	26 ¹ 32	26 ¹ 29	19 ¹ 48	25 ¹ 56	M10
T 11	3 54 17	27 ²⁷ 04	14 ¹⁴	8 ⁴⁵	15 ³⁰	8 ³¹	16 ¹⁸	8 ³²	15 ¹ 1	26 ¹ 17	27 ¹ 45	26 ¹ 19	26 ¹ 26	19 ¹ 54	25 ¹ 59	T 11
W12	3 58 13	28 ²⁷ 51	27 ¹ 1	10 ⁶	16 ⁴⁵	9 ¹²	16 ²¹	8 ³⁷	15 ¹ 1	26 ¹ 16	27 ¹ 43	26 ¹ 7	26 ¹ 23	20 ¹ 1	26 ¹ 3	W12
T 13	4 2 10	29 ²⁸ 40	9 ¹² 30	11 ²⁸	18 ⁰	9 ⁵³	16 ²³	8 ⁴³	15 ¹ 0	26 ¹ 16	27 ¹ 42	25 ¹ 58	26 ¹ 19	20 ¹ 7	26 ¹ 6	T 13
F 14	4 6 6	0 ¹² 29'31	21 ⁴²	12 ⁵²	19 ¹⁵	10 ³⁵	16 ²⁵	8 ⁴⁸	15 ¹ 0	26 ¹ 15	27 ¹ 41	25 ¹ 51	26 ¹ 16	20 ¹ 14	26 ¹ 9	F 14
S 15	4 10 3	1 ³⁰ 22	3 ¹² 42	14 ¹⁷	20 ³⁰	11 ¹⁶	16 ²⁷	8 ⁵⁴	15 ¹ 0	26 ¹ 14	27 ¹ 40	25 ¹ 47	26 ¹ 13	20 ¹ 21	26 ¹ 12	S 15
S 16	4 13 59	2 ³¹ 16	15 ³³	15 ⁴⁴	21 ⁴⁵	11 ⁵⁷	16 ²⁸	8 ⁵⁹	15 ¹ D 0	26 ¹ 13	27 ¹ 39	25 ¹ 45	26 ¹ 10	20 ¹ 27	26 ¹ 16	S 16
M17	4 17 56	3 ³² 10	27 ²⁰	17 ¹¹	22 ⁵⁹	12 ³⁹	16 ³⁰	9 ⁴	15 ¹ 0	26 ¹ 12	27 ¹ 38	25 ¹ 45	26 ¹ 7	20 ¹ 34	26 ¹ 19	M17
T 18	4 21 52	4 ³³ 06	9 ¹¹ 9	18 ³⁹	24 ¹⁴	13 ²⁰	16 ³¹	9 ⁹	15 ¹ 0	26 ¹ 12	27 ¹ 37	25 ¹ 45	26 ¹ 4	20 ¹ 41	26 ¹ 23	T 18
W19	4 25 49	5 ³⁴ 03	21 ⁶	20 ⁸	25 ²⁹	14 ²	16 ³²	9 ¹⁵	15 ¹ 0	26 ¹ 11	27 ¹ 36	25 ¹ 44	26 ¹ 0	20 ¹ 47	26 ¹ 26	W19
T 20	4 29 46	6 ³⁵ 01	3 ¹² 51	21 ³⁸	26 ⁴⁴	14 ⁴⁴	16 ³³	9 ²⁰	15 ¹ 1	26 ¹ 10	27 ¹ 35	25 ¹ 41	25 ¹ 57	20 ¹ 54	26 ¹ 30	T 20
F 21	4 33 42	7 ³⁶ 00	15 ⁴²	23 ⁸	27 ⁵⁹	15 ²⁵	16 ³⁴	9 ²⁵	15 ¹ 1	26 ¹ 9	27 ¹ 34	25 ¹ 36	25 ¹ 54	21 ¹ 1	26 ¹ 33	F 21
S 22	4 37 39	8 ³⁷ 01	28 ³¹	24 ³⁸	29 ¹⁴	16 ⁷	16 ³⁴	9 ³⁰	15 ¹ 1	26 ¹ 8	27 ¹ 33	25 ¹ 28	25 ¹ 51	21 ¹ 7	26 ¹ 37	S 22
S 23	4 41 35	9 ³⁸ 03	11 ¹¹ 43	26 ⁹	0 ¹² 29	16 ⁴⁸	16 ³⁴	9 ³⁴	15 ¹ 2	26 ¹ 7	27 ¹ 31	25 ¹ 17	25 ¹ 48	21 ¹ 14	26 ¹ 41	S 23
M24	4 45 32	10 ³⁹ 06	25 ¹⁸	27 ⁴⁰	1 ⁴⁴	17 ³⁰	16 ³⁵	9 ³⁹	15 ¹ 2	26 ¹ 6	27 ¹ 30	25 ¹ 5	25 ¹ 45	21 ¹ 21	26 ¹ 45	M24
T 25	4 49 28	11 ⁴⁰ 09	9 ¹¹ 14	29 ¹¹	2 ⁵⁹	18 ¹²	16 ³⁴	9 ⁴⁴	15 ¹ 2	26 ¹ 5	27 ¹ 29	24 ¹ 53	25 ¹ 41	21 ¹ 27	26 ¹ 48	T 25
W26	4 53 25	12 ⁴¹ 14	23 ²⁷	0 ¹¹ 43	4 ¹⁴	18 ⁵⁴	16 ³⁴	9 ⁴⁸	15 ¹ 3	26 ¹ 3	27 ¹ 28	24 ¹ 42	25 ¹ 38	21 ¹ 34	26 ¹ 52	W26
T 27	4 57 21	13 ⁴² 19	7 ¹² 50	2 ¹⁵	5 ²⁹	19 ³⁶	16 ³⁴	9 ⁵³	15 ¹ 4	26 ¹ 2	27 ¹ 27	24 ¹ 32	25 ¹ 35	21 ¹ 40	26 ¹ 56	T 27
F 28	5 1 18	14 ⁴³ 25	22 ¹⁸	3 ⁴⁷	6 ⁴⁴	20 ¹⁷	16 ³³	9 ⁵⁷	15 ¹ 4	26 ¹ 1	27 ¹ 26	24 ¹ 26	25 ¹ 32	21 ¹ 47	27 ¹ 0	F 28
S 29	5 5 15	15 ⁴⁴ 32	6 ¹¹ 45	5 ¹⁹	7 ⁵⁹	20 ⁵⁹	16 ³²	10 ²	15 ¹ 5	26 ¹ 0	27 ¹ 24	24 ¹ 22	25 ¹ 29	21 ¹ 54	27 ¹ 4	S 29
S 30	5 9 11	16 ⁴⁵ 38	21 ¹¹ 6	6 ¹¹ 52	9 ¹³	21 ¹¹ 41	16 ¹² 31	10 ¹² 6	15 ¹ 5	25 ¹ Ω59	27 ¹ II23	24 ¹ D21	25 ¹ Ω25	22 ¹ Ω 0	27 ¹ Ω 8	S 30

Delta T = 07m18s

Julian Calendar 1 Nov. 1421 == Greg. Calendar 10 Nov. 1421

DECEMBER 1421 JC

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	5 13 8	17 ¹¹ 46'45	5 ¹¹ 19	8 ¹¹ 24	10 ¹² 28	22 ¹¹ 23	16 ¹ R30	10 ¹² 10	15 ¹ 6	25 ¹ R57	27 ¹ R22	24 ¹ Ω21	25 ¹ Ω22	22 ¹ Ω 7	27 ¹ Ω12	M 1
T 2	5 17 4	18 ⁴⁷ 53	19 ²²	9 ⁵⁷	11 ⁴³	23 ⁵	16 ¹² 28	10 ¹⁴	15 ¹ 7	25 ¹ Ω56	27 ¹ II21	24 ¹ R22	25 ¹ 19	22 ¹ 14	27 ¹ 16	T 2
W 3	5 21 1	19 ⁴⁹ 00	3 ¹¹ 15	11 ³⁰	12 ⁵⁸	23 ⁴⁷	16 ²⁶	10 ¹⁸	15 ¹ 8	25 ¹ 55	27 ¹ 20	24 ¹ 21	25 ¹ 16	22 ¹ 20	27 ¹ 20	W 3
T 4	5 24 57	20 ⁵⁰ 08	16 ⁵⁸	13 ³	14 ¹³	24 ²⁹	16 ²⁵	10 ²²	15 ¹ 9	25 ¹ 54	27 ¹ 18	24 ¹ 18	25 ¹ 13	22 ¹ 27	27 ¹ 25	T 4
F 5	5 28 54	21 ⁵¹ 16	0 ¹² 30	14 ³⁶	15 ²⁸	25 ¹¹	16 ²²	10 ²⁶	15 ¹ 10	25 ¹ 52	27 ¹ 17	24 ¹ 12	25 ¹ 10	22 ¹ 34	27 ¹ 29	F 5
S 6	5 32 50	22 ⁵² 24	13 ⁵²	16 ¹⁰	16 ⁴²	25 ⁵⁴	16 ²⁰	10 ³⁰	15 ¹ 11	25 ¹ 51	27 ¹ 16	24 ¹ 4	25 ¹ 6	22 ¹ 40	27 ¹ 33	S 6
S 7	5 36 47	23 ⁵³ 32	27 ²	17 ⁴⁴	17 ⁵⁷	26 ³⁶	16 ¹⁸	10 ³⁴	15 ¹ 12	25 ¹ 50	27 ¹ 15	23 ¹ 54	25 ¹ 3	22 ¹ 47	27 ¹ 37	S 7
M 8	5 40 44	24 ⁵⁴ 40	10 ¹¹ 1	19 ¹⁷	19 ¹²	27 ¹⁸	16 ¹⁵	10 ³⁷	15 ¹ 13	25 ¹ 48	27 ¹ 14	23 ¹ 43	25 ¹ 0	22 ¹ 54	27 ¹ 41	M 8
T 9	5 44 40	25 ⁵⁵ 49	22 ⁴⁶	20 ⁵²	20 ²⁷	28 ⁰	16 ¹²	10 ⁴¹	15 ¹ 14	25 ¹ 47	27 ¹ 12	23 ¹ 32	24 ¹ 57	23 ¹ 0	27 ¹ 46	T 9
W10	5 48 37	26 ⁵⁶ 58	5 ¹² 18	22 ²⁶	21 ⁴¹	28 ⁴³	16 ⁹	10 ⁴⁴	15 ¹ 15	25 ¹ 45	27 ¹ 11	23 ¹ 22	24 ¹ 54	23 ¹ 7	27 ¹ 50	W10
T 11	5 52 33	27 ⁵⁸ 08	17 ³⁷	24 ¹	22 ⁵⁶	29 ²⁵	16 ⁶	10 ⁴⁷	15 ¹ 17	25 ¹ 44	27 ¹ 10	23 ¹ 14	24 ¹ 51	23 ¹ 14	27 ¹ 55	T 11
F 12	5 56 30	28 ⁵⁹ 17	29 ⁴³	25 ³⁶	24 ¹¹	0 ¹¹ 7	16 ³	10 ⁵¹	15 ¹ 18	25 ¹ 43	27 ¹ 9	23 ¹ 8	24 ¹ 47	23 ¹ 20	27 ¹ 59	F 12
S 13	6 0 26	0 ¹² 0'27	11 ¹² 40	27 ¹¹	25 ²⁵	0 ⁵⁰	15 ⁵⁹	10 ⁵⁴	15 ¹ 19	25 ¹ 41	27 ¹ 8	23 ¹ 5	24 ¹ 44	23 ¹ 27	28 ¹ 3	S 13
S 14	6 4 23	1 ¹ 1'37	23 ²⁹	28 ⁴⁶	26 ⁴⁰	1 ³²	15 ⁵⁵	10 ⁵⁷	15 ¹ 21	25 ¹ 40	27 ¹ 6	23 ¹ D 5	24 ¹ 41	23 ¹ 33	28 ¹ 8	S 14
M15	6 8 19	2 ² 2'48	5 ¹¹ 16	0 ¹² 22	27 ⁵⁵	2 ¹⁵	15 ⁵¹	11 ⁰	15 ¹ 22	25 ¹ 38	27 ¹ 5	23 ¹ 5	24 ¹ 38	23 ¹ 40	28 ¹ 12	M15
T 16	6 12 16	3 ³ 3'59	17 ⁴	1 ⁵⁸	29 ⁹	2 ⁵⁷	15 ⁴⁷	11 ³	15 ¹ 24	25 ¹ 37	27 ¹ 4	23 ¹ 7	24 ¹ 35	23 ¹ 47	28 ¹ 17	T 16
W17	6 16 13	4 ⁵ 5'09	28 ⁵⁹	3 ³⁵	0 ¹¹ 24	3 ⁴⁰	15 ⁴³	11 ⁵	15 ¹ 25	25 ¹ 35	27 ¹ 3	23 ¹ R 8	24 ¹ 31	23 ¹ 53	28 ¹ 21	W17
T 18	6 20 9	5 ⁶ 6'21	11 ¹² 6	5 ¹²	1 ³⁸	4 ²²	15 ³⁹	11 ⁸	15 ¹ 27	25 ¹ 33	27 ¹ 1	23 ¹ 8	24 ¹ 28	24 ¹ 0	28 ¹ 26	T 18
F 19	6 24 6	6 ⁷ 7'32	23 ³¹	6 ⁴⁹	2 ⁵³	5 ⁵	15 ³⁴	11 ¹¹	15 ¹ 29	25 ¹ 32	27 ¹ 0	23 ¹ 6	24 ¹ 25	24 ¹ 7	28 ¹ 31	F 19
S 20	6 28 2	7 ⁸ 8'44	6 ¹¹ 18	8 ²⁷	4 ⁷	5 ⁴⁸	15 ²⁹	11 ¹³	15 ¹ 30	25 ¹ 30	26 ⁵⁹	23 ¹ 2	24 ¹ 22	24 ¹ 13	28 ¹ 35	S 20
S 21	6 31 59	8 ⁹ 9'55	19 ³⁰	10 ⁵	5 ²²	6 ³⁰	15 ²⁴	11 ¹⁵	15 ¹ 32	25 ¹ 29	26 ⁵⁸	22 ¹ 56	24 ¹ 19	24 ¹ 20	28 ¹ 40	S 21
M22	6 35 55	9 ¹¹ 1'07	3 ¹¹ 10	11 ⁴³	6 ³⁶	7 ¹³	15 ¹⁹	11 ¹⁸	15 ¹ 34	25 ¹ 27	26 ⁵⁷	22 ¹ 50	24 ¹ 16	24 ¹ 27	28 ¹ 45	M22
T 23	6 39 52	10 ¹² 1'19	17 ¹⁵	13 ²²	7 ⁵¹	7 ⁵⁶	15 ¹⁴	11 ²⁰	15 ¹ 36	25 ¹ 25	26 ⁵⁶	22 ¹ 42	24 ¹ 12	24 ¹ 33	28 ¹ 49	T 23
W24	6 43 49	11 ¹³ 3'30	1 ¹² 44	15 ¹	9 ⁵	8 ³⁹	15 ⁸	11 ²²	15 ¹ 37	25 ¹ 24	26 ⁵⁴	22 ¹ 35	24 ¹ 9	24 ¹ 40	28 ¹ 54	W24
T 25	6 47 45	12 ¹⁴ 4'42	16 ²⁸	16 ⁴¹	10 ²⁰	9 ²²	15 ⁵	11 ²⁴	15 ¹ 39	25 ¹ 22	26 ⁵³	22 ¹ 30	24 ¹ 6	24 ¹ 47	28 ¹ 59	T 25
F 26	6 51 42	13 ¹⁵ 5'53	1 ¹² 22	18 ²¹	11 ³⁴	10 ⁵	14 ⁵⁷	11 ²⁶	15 ¹ 41	25 ¹ 21	26 ⁵²	22 ¹ 26	24 ¹ 3	24 ¹ 53	29 ¹ 3	F 26
S 27	6 55 38	14 ¹⁷ 0'3	16 ¹⁵	20 ²	12 ⁴⁸	10 ⁴⁸	14 ⁵¹	11 ²⁷	15 ¹ 43	25 ¹ 19	26 ⁵¹	22 ¹ D24	24 ¹ 0	25 ¹ 0	29 ¹ 8	S 27
S 28	6 59 35	15 ¹⁸ 1'3	1 ¹² 1	21 ⁴³	14 ³	11 ³¹	14 ⁴⁵	11 ²⁹	15 ¹ 45	25 ¹ 17	26 ⁵⁰	22 ¹ 24	23 ¹ 57	25 ¹ 7	29 ¹ 13	S 28
M29	7 3 31	16 ¹⁹ 1'22	15 ³⁴	23 ²⁴	15 ¹⁷	12 ¹⁴	14 ³⁹	11 ³⁰	15 ¹ 47	25 ¹ 16	26 ⁴⁹	22 ¹ 26	23 ¹ 53	25 ¹ 13	29 ¹ 18	M29
T 30	7 7 28	17 ²⁰ 2'31	29 ⁵¹	25 ⁵	16 ³¹	12 ⁵⁷	14 ³³	11 ³²	15 ¹ 50	25 ¹ 14	26 ⁴⁷	22 ¹ 27	23 ¹ 50	25 ¹ 20	29 ¹ 22	T 30
W31	7 11 24	18 ²¹ 3'38	13 ¹¹ 49	26 ¹² 47	17 ¹¹ 45	13 ¹¹ 40	14 ¹² 26	11 ¹² 33	15 ¹ 52	25 ¹ Ω12	26 ¹ II46	22 ¹ R28	23 ¹ Ω47	25 ¹ Ω26	29 ¹ Ω27	W31