



# Astrodienst Ephemeris Tables for the year 1437

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 1437

## geocentric

JANUARY 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	7 16 49	19°34'03	3°11'29	25°R29	4°35'53	8°31'49	17°11'10	20°31'48	15°R50	29°R 8	14°R53	4°R18	3°11'36	5°35'57	1°31'40	T 1
W 2	7 20 45	20°46'09	17°40	24°31'18	5°42	9°31	17°19	20°53	15°31'49	29°R 7	14°31'52	4°11'18	3°33	6°4	1°42	W 2
T 3	7 24 42	21°47'15	1°37'57	23°3	6°31	10°13	17°28	20°58	15°49	29°6	14°51	4°15	3°30	6°10	1°44	T 3
F 4	7 28 39	22°48'21	16°15	21°46	7°22	10°56	17°37	21°3	15°48	29°5	14°49	4°10	3°26	6°17	1°45	F 4
S 5	7 32 35	23°49'26	0°31	20°29	8°14	11°38	17°45	21°8	15°48	29°3	14°48	4°2	3°23	6°24	1°47	S 5
S 6	7 36 32	24°50'30	14°39	19°14	9°6	12°20	17°54	21°13	15°47	29°2	14°47	3°51	3°20	6°30	1°49	S 6
M 7	7 40 28	25°51'34	28°35	18°4	9°58	13°2	18°2	21°18	15°47	29°1	14°46	3°38	3°17	6°37	1°51	M 7
T 8	7 44 25	26°52'37	12°31'14	17°0	10°52	13°45	18°11	21°24	15°46	28°59	14°44	3°25	3°14	6°44	1°53	T 8
W 9	7 48 21	27°53'39	25°32	16°3	11°46	14°27	18°19	21°29	15°46	28°58	14°43	3°13	3°10	6°50	1°55	W 9
T 10	7 52 18	28°54'39	8°31'29	15°14	12°41	15°10	18°27	21°34	15°46	28°57	14°42	3°2	3°7	6°57	1°57	T 10
F 11	7 56 14	29°55'39	21°4	14°34	13°36	15°52	18°35	21°40	15°46	28°55	14°41	2°55	3°4	7°4	1°59	F 11
S 12	8 0 11	0°56'37	3°31'21	14°3	14°32	16°35	18°43	21°46	15°45	28°54	14°39	2°50	3°1	7°10	2°1	S 12
S 13	8 4 8	1°57'34	15°22	13°41	15°29	17°17	18°50	21°51	15°45	28°52	14°38	2°48	2°58	7°17	2°3	S 13
M14	8 8 4	2°58'30	27°14	13°27	16°26	18°0	18°58	21°57	15°45	28°51	14°37	2°47	2°55	7°24	2°5	M14
T 15	8 12 1	3°59'25	9°8'2	13°D22	17°23	18°42	19°5	22°3	15°D45	28°49	14°36	2°47	2°51	7°30	2°8	T 15
W16	8 15 57	5°0'18	20°51	13°24	18°21	19°25	19°13	22°9	15°45	28°48	14°34	2°46	2°48	7°37	2°10	W16
T 17	8 19 54	6°1'10	2°11'46	13°33	19°19	20°7	19°20	22°15	15°45	28°46	14°33	2°44	2°45	7°43	2°12	T 17
F 18	8 23 50	7°2'00	14°54	13°50	20°18	20°50	19°27	22°21	15°46	28°45	14°32	2°39	2°42	7°50	2°15	F 18
S 19	8 27 47	8°2'50	27°17	14°12	21°18	21°33	19°34	22°27	15°46	28°43	14°31	2°32	2°39	7°57	2°17	S 19
S 20	8 31 43	9°3'37	9°31'58	14°40	22°18	22°15	19°40	22°33	15°46	28°42	14°30	2°22	2°36	8°3	2°19	S 20
M21	8 35 40	10°4'23	23°0	15°14	23°18	22°58	19°47	22°39	15°46	28°40	14°28	2°9	2°32	8°10	2°22	M21
T 22	8 39 37	11°5'08	6°12'21	15°52	24°18	23°41	19°53	22°45	15°47	28°39	14°27	1°56	2°29	8°17	2°25	T 22
W23	8 43 33	12°5'52	20°0	16°34	25°19	24°24	19°59	22°51	15°47	28°37	14°26	1°44	2°26	8°23	2°27	W23
T 24	8 47 30	13°6'34	3°11'52	17°21	26°21	25°6	20°5	22°58	15°48	28°36	14°25	1°32	2°23	8°30	2°30	T 24
F 25	8 51 26	14°7'15	17°54	18°11	27°22	25°49	20°11	23°4	15°48	28°34	14°24	1°24	2°20	8°37	2°32	F 25
S 26	8 55 23	15°7'54	2°2'2	19°5	28°24	26°32	20°17	23°11	15°49	28°32	14°23	1°18	2°16	8°43	2°35	S 26
S 27	8 59 19	16°8'33	16°12	20°2	29°27	27°15	20°23	23°17	15°49	28°31	14°22	1°15	2°13	8°50	2°38	S 27
M28	9 3 16	17°9'10	0°11'21	21°2	0°32'29	27°58	20°28	23°24	15°50	28°29	14°21	1°D15	2°10	8°57	2°41	M28
T 29	9 7 12	18°9'46	14°28	22°4	1°32	28°41	20°34	23°30	15°51	28°27	14°20	1°R15	2°7	9°3	2°43	T 29
W30	9 11 9	19°10'21	28°31	23°9	2°36	29°24	20°39	23°37	15°52	28°26	14°19	1°15	2°4	9°10	2°46	W30
T 31	9 15 6	20°10'54	12°31'32	24°31'16	3°33'39	0°37	20°11'44	23°31'44	15°52	28°24	14°18	1°11'13	2°11	9°16	2°49	T 31

Delta T = 06m52s

Julian Calendar 1 Jan. 1437 == Greg. Calendar 10 Jan. 1437

FEBRUARY 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	9 19 2	21°11'27	26°31'27	25°32'25	4°34'43	0°35'50	20°11'48	23°31'50	15°31'53	28°R22	14°R17	1°R 8	1°11'57	9°31'23	2°31'52	F 1
S 2	9 22 59	22°11'58	10°31'16	26°36	5°47	1°33	20°53	23°57	15°54	28°R21	14°R16	1°11	1°54	9°30	2°55	S 2
S 3	9 26 55	23°12'28	23°57	27°49	6°52	2°16	20°58	24°4	15°55	28°19	14°15	0°51	1°51	9°36	2°58	S 3
M 4	9 30 52	24°12'56	7°31'27	29°3	7°57	2°59	21°2	24°11	15°56	28°17	14°14	0°40	1°48	9°43	3°1	M 4
T 5	9 34 48	25°13'23	20°44	0°32'20	9°1	3°42	21°6	24°18	15°57	28°16	14°13	0°28	1°45	9°50	3°4	T 5
W 6	9 38 45	26°13'47	3°31'45	1°38	10°6	4°26	21°10	24°25	15°58	28°14	14°12	0°17	1°42	9°56	3°7	W 6
T 7	9 42 41	27°14'10	16°29	2°57	11°12	5°9	21°14	24°31	16°0	28°12	14°11	0°7	1°38	10°3	3°10	T 7
F 8	9 46 38	28°14'32	28°57	4°18	12°17	5°52	21°17	24°38	16°1	28°11	14°10	0°0	1°35	10°10	3°13	F 8
S 9	9 50 34	29°14'51	11°31'10	5°40	13°23	6°35	21°21	24°46	16°2	28°9	14°9	29°D56	1°32	10°16	3°17	S 9
S 10	9 54 31	0°31'59	23°10	7°3	14°29	7°19	21°24	24°53	16°4	28°7	14°8	29°54	1°29	10°23	3°20	S 10
M11	9 58 28	1°15'24	5°31'2	8°28	15°35	8°2	21°27	25°0	16°5	28°6	14°7	29°D54	1°26	10°30	3°23	M11
T 12	10 2 24	2°15'37	16°49	9°54	16°41	8°45	21°30	25°7	16°6	28°4	14°7	29°55	1°22	10°36	3°26	T 12
W13	10 6 21	3°15'49	28°38	11°21	17°48	9°28	21°33	25°14	16°8	28°2	14°6	29°R56	1°19	10°43	3°29	W13
T 14	10 10 17	4°15'58	10°11'34	12°50	18°55	10°12	21°35	25°21	16°9	28°1	14°5	29°55	1°16	10°50	3°33	T 14
F 15	10 14 14	5°16'05	22°41	14°19	20°1	10°55	21°38	25°28	16°11	27°59	14°4	29°54	1°13	10°56	3°36	F 15
S 16	10 18 10	6°16'11	5°31'5	15°50	21°8	11°39	21°40	25°36	16°13	27°57	14°4	29°50	1°10	11°3	3°39	S 16
S 17	10 22 7	7°16'14	17°50	17°22	22°16	12°22	21°42	25°43	16°14	27°56	14°3	29°44	1°7	11°9	3°43	S 17
M18	10 26 3	8°16'14	0°12'58	18°55	23°23	13°5	21°44	25°50	16°16	27°54	14°2	29°36	1°3	11°16	3°46	M18
T 19	10 30 0	9°16'13	14°31	20°29	24°30	13°49	21°45	25°57	16°18	27°52	14°1	29°27	1°0	11°23	3°50	T 19
W20	10 33 57	10°16'10	28°26	22°5	25°38	14°32	21°47	26°5	16°20	27°51	14°1	29°19	0°57	11°29	3°53	W20
T 21	10 37 53	11°16'04	12°11'40	23°41	26°46	15°16	21°48	26°12	16°21	27°49	14°0	29°11	0°54	11°36	3°56	T 21
F 22	10 41 50	12°15'57	27°8	25°19	27°54	15°59	21°49	26°20	16°23	27°48	14°0	29°6	0°51	11°43	4°0	F 22
S 23	10 45 46	13°15'47	11°11'43	26°57	29°2	16°43	21°50	26°27	16°25	27°46	13°59	29°2	0°47	11°49	4°3	S 23
S 24	10 49 43	14°15'36	26°18	28°37	0°31'10	17°26	21°51	26°34	16°27	27°44	13°58	29°D 1	0°44	11°56	4°7	S 24
M25	10 53 39	15°15'24	10°11'50	0°31'19	1°18	18°10	21°51	26°42	16°29	27°43	13°58	29°1	0°41	12°3	4°10	M25
T 26	10 57 36	16°15'09	25°12	2°1	2°27	18°54	21°52	26°49	16°31	27°41	13°57	29°3	0°38	12°9	4°14	T 26
W27	11 1 32	17°14'53	9°31'23	3°44	3°35	19°37	21°R52	26°57	16°33	27°40	13°57	29°4	0°35	12°16	4°17	W27
T 28	11 5 29	18°14'35	23°31'21	5°31'29	4°44	20°31	21°11'52	27°31'4	16°36	27°38	13°56	29°R 4	0°11'32	12°31'23	4°21'21	T 28

Delta T = 06m52s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1437  
geocentric

MARCH 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	11 9 26	19°14'15	7°36	7°15	5°53	21°5	21°R51	27°12	16°38	27°R37	13°R56	29°R 3	0°M28	12°R29	4°Y25	F 1
S 2	11 13 22	20°13'54	20°38	9° 2	7° 1	21°48	21°M51	27°19	16°40	27°R35	13°R56	28°M59	0°25	12°36	4°28	S 2
S 3	11 17 19	21°13'31	3°57	10°51	8°10	22°32	21°50	27°27	16°42	27°34	13°55	28°54	0°22	12°43	4°32	S 3
M 4	11 21 15	22°13'06	17° 3	12°41	9°20	23°16	21°50	27°34	16°45	27°32	13°55	28°48	0°19	12°49	4°35	M 4
T 5	11 25 12	23°12'39	29°56	14°31	10°29	23°59	21°49	27°42	16°47	27°31	13°54	28°42	0°16	12°56	4°39	T 5
W 6	11 29 8	24°12'10	12°36	16°24	11°38	24°43	21°47	27°49	16°49	27°29	13°54	28°36	0°13	13° 2	4°43	W 6
T 7	11 33 5	25°11'39	25° 3	18°17	12°47	25°27	21°46	27°57	16°52	27°28	13°54	28°31	0° 9	13° 9	4°46	T 7
F 8	11 37 1	26°11'06	7°18	20°12	13°57	26°11	21°44	28° 4	16°54	27°26	13°54	28°27	0° 6	13°16	4°50	F 8
S 9	11 40 58	27°10'31	19°22	22° 8	15° 6	26°54	21°43	28°12	16°57	27°25	13°53	28°25	0° 3	13°22	4°54	S 9
S 10	11 44 54	28° 9'54	18°17	24° 5	16°16	27°38	21°41	28°19	16°59	27°23	13°53	28°D25	29°M59	13°29	4°57	S 10
M 11	11 48 51	29° 9'14	13° 7	26° 4	17°26	28°22	21°39	28°27	17° 2	27°22	13°53	28°26	29°57	13°36	5° 1	M 11
T 12	11 52 48	0°Y 8'33	24°54	28° 3	18°35	29° 6	21°36	28°34	17° 4	27°21	13°53	28°28	29°53	13°42	5° 5	T 12
W 13	11 56 44	1° 7'49	6°II43	0°Y 4	19°45	29°50	21°34	28°42	17° 7	27°19	13°53	28°29	29°50	13°49	5° 8	W 13
T 14	12 0 41	2° 7'03	18°38	2° 5	20°55	0°M34	21°31	28°49	17°10	27°18	13°52	28°31	29°47	13°56	5°12	T 14
F 15	12 4 37	3° 6'14	0°M44	4° 8	22° 5	1°17	21°28	28°57	17°12	27°17	13°52	28°R32	29°44	14° 2	5°16	F 15
S 16	12 8 34	4° 5'23	13° 6	6°11	23°15	2° 1	21°25	29° 5	17°15	27°15	13°52	28°31	29°41	14° 9	5°19	S 16
S 17	12 12 30	5° 4'30	25°48	8°15	24°25	2°45	21°22	29°12	17°18	27°14	13°52	28°30	29°38	14°16	5°23	S 17
M 18	12 16 27	6° 3'34	8°M54	10°19	25°35	3°29	21°19	29°20	17°21	27°13	13°52	28°28	29°34	14°22	5°27	M 18
T 19	12 20 23	7° 2'36	22°27	12°23	26°46	4°13	21°15	29°27	17°24	27°12	13°D52	28°25	29°31	14°29	5°30	T 19
W 20	12 24 20	8° 1'36	6°M26	14°28	27°56	4°57	21°12	29°35	17°26	27°10	13°52	28°22	29°28	14°36	5°34	W 20
T 21	12 28 17	9° 0'34	20°49	16°32	29° 6	5°41	21° 8	29°42	17°29	27° 9	13°52	28°19	29°25	14°42	5°38	T 21
F 22	12 32 13	9°59'29	5°M32	18°35	0°M17	6°25	21° 4	29°49	17°32	27° 8	13°52	28°17	29°22	14°49	5°41	F 22
S 23	12 36 10	10°58'22	20°27	20°37	1°27	7° 9	21° 0	29°57	17°35	27° 7	13°52	28°16	29°19	14°55	5°45	S 23
S 24	12 40 6	11°57'14	5°M26	22°39	2°38	7°52	20°55	0°Y 4	17°38	27° 6	13°52	28°D16	29°15	15° 2	5°49	S 24
M 25	12 44 3	12°56'03	20°22	24°38	3°48	8°36	20°51	0°12	17°41	27° 5	13°53	28°17	29°12	15° 9	5°52	M 25
T 26	12 47 59	13°54'51	5°M 7	26°36	4°59	9°20	20°46	0°19	17°44	27° 4	13°53	28°18	29° 9	15°15	5°56	T 26
W 27	12 51 56	14°53'37	19°35	28°31	6°10	10° 4	20°41	0°27	17°47	27° 3	13°53	28°19	29° 6	15°22	6° 0	W 27
T 28	12 55 52	15°52'21	3°M43	0°M23	7°20	10°48	20°36	0°34	17°50	27° 2	13°53	28°20	29° 3	15°29	6° 3	T 28
F 29	12 59 49	16°51'04	17°31	2°13	8°31	11°32	20°31	0°41	17°53	27° 1	13°53	28°R20	28°59	15°35	6° 7	F 29
S 30	13 3 46	17°49'45	0°M58	3°59	9°42	12°16	20°26	0°49	17°56	27° 0	13°54	28°20	28°56	15°42	6°11	S 30
S 31	13 7 42	18°Y48'24	14°M 5	5°M42	10°M53	13°M 0	20°M20	0°Y56	18°M 0	26°M59	13°M54	28°M19	28°M53	15°M49	6°Y14	S 31

Delta T = 06m52s

Julian Calendar 1 March 1437 == Greg. Calendar 10 March 1437

APRIL 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	13 11 39	19°Y47'01	26°M55	7°M21	12°M 4	13°M44	20°R15	1°Y 3	18°M 3	26°R58	13°M54	28°R18	28°M50	15°M55	6°Y18	M 1
T 2	13 15 35	20°45'37	9°M30	8°56	13°15	14°28	20°M 9	1°11	18° 6	26°M57	13°55	28°M17	28°47	16° 2	6°21	T 2
W 3	13 19 32	21°44'11	21°51	10°26	14°26	15°12	20° 3	1°18	18° 9	26°56	13°55	28°16	28°44	16° 9	6°25	W 3
T 4	13 23 28	22°42'43	4°Y 2	11°52	15°37	15°56	19°57	1°25	18°12	26°56	13°55	28°15	28°40	16°15	6°28	T 4
F 5	13 27 25	23°41'13	16° 4	13°14	16°48	16°40	19°51	1°32	18°16	26°55	13°56	28°15	28°37	16°22	6°32	F 5
S 6	13 31 21	24°39'41	28° 0	14°30	17°59	17°24	19°45	1°39	18°19	26°54	13°56	28°D15	28°34	16°29	6°36	S 6
S 7	13 35 18	25°38'08	9°M50	15°42	19°11	18° 8	19°39	1°46	18°22	26°53	13°57	28°15	28°31	16°35	6°39	S 7
M 8	13 39 14	26°36'32	21°38	16°49	20°22	18°52	19°32	1°54	18°25	26°53	13°57	28°15	28°28	16°42	6°43	M 8
T 9	13 43 11	27°34'55	3°II25	17°51	21°33	19°36	19°26	2° 1	18°29	26°52	13°58	28°15	28°24	16°49	6°46	T 9
W 10	13 47 8	28°33'15	15°16	18°48	22°45	20°19	19°19	2° 8	18°32	26°51	13°58	28°R15	28°21	16°55	6°50	W 10
T 11	13 51 4	29°31'34	27°13	19°39	23°56	21° 3	19°13	2°15	18°35	26°51	13°59	28°15	28°18	17° 2	6°53	T 11
F 12	13 55 1	0°M29'51	9°M20	20°26	25° 7	21°47	19° 6	2°22	18°39	26°50	13°59	28°15	28°15	17° 9	6°57	F 12
S 13	13 58 57	1°28'05	21°41	21° 7	26°19	22°31	18°59	2°29	18°42	26°50	14° 0	28°15	28°12	17°15	7° 0	S 13
S 14	14 2 54	2°26'18	4°M20	21°42	27°30	23°15	18°52	2°36	18°46	26°49	14° 1	28°D15	28° 9	17°22	7° 3	S 14
M 15	14 6 50	3°24'28	17°20	22°13	28°42	23°59	18°45	2°42	18°49	26°49	14° 1	28°15	28° 5	17°28	7° 7	M 15
T 16	14 10 47	4°22'36	0°M46	22°37	29°53	24°43	18°38	2°49	18°52	26°48	14° 2	28°15	28° 2	17°35	7°10	T 16
W 17	14 14 43	5°20'43	14°38	22°57	1°Y 5	25°26	18°30	2°56	18°56	26°48	14° 3	28°16	27°59	17°42	7°14	W 17
T 18	14 18 40	6°18'47	28°56	23°11	2°16	26°10	18°23	3° 3	18°59	26°48	14° 3	28°17	27°56	17°48	7°17	T 18
F 19	14 22 37	7°16'50	13°M39	23°19	3°28	26°54	18°16	3° 9	19° 3	26°47	14° 4	28°17	27°53	17°55	7°20	F 19
S 20	14 26 33	8°14'50	28°39	23°R23	4°39	27°38	18° 8	3°16	19° 6	26°47	14° 5	28°R17	27°50	18° 2	7°23	S 20
S 21	14 30 30	9°12'49	13°M50	23°21	5°51	28°21	18° 1	3°23	19° 9	26°47	14° 6	28°17	27°46	18° 8	7°27	S 21
M 22	14 34 26	10°10'47	29° 2	23°14	7° 3	29° 5	17°54	3°29	19°13	26°46	14° 6	28°16	27°43	18°15	7°30	M 22
T 23	14 38 23	11° 8'43	14°M 5	23° 3	8°14	29°49	17°46	3°36	19°16	26°46	14° 7	28°15	27°40	18°22	7°33	T 23
W 24	14 42 19	12° 6'37	28°51	22°47	9°26	0°M33	17°39	3°42	19°20	26°46	14° 8	28°13	27°37	18°28	7°36	W 24
T 25	14 46 16	13° 4'31	13°M14	22°27	10°38	1°16	17°31	3°49	19°23	26°46	14° 9	28°12	27°34	18°35	7°39	T 25
F 26	14 50 12	14° 2'23	27°12	22° 4	11°49	2° 0	17°23	3°55	19°27	26°46	14°10	28°10	27°30	18°42	7°43	F 26
S 27	14 54 9	15° 0'13	10°M43	21°37	13° 1	2°43	17°16	4° 1	19°30	26°46	14°11	28°D10	27°27	18°48	7°46	S 27
S 28	14 58 6	15°58'03	23°49	21° 7	14°13	3°27	17° 8	4° 8	19°34	26°46	14°12	28°10	27°24	18°55	7°49	S 28
M 29	15 2 2	16°55'51	6°M33	20°36	15°25	4°11	17° 0	4°14	19°37	26°D46	14°13	28°11	27°21	19° 2	7°52	M 29
T 30	15 5 59	17°M53'38	18°M58	20°M 2	16°Y37	4°M54	16°M53	4°Y20	19°M41	26°M46	14°M13	28°M12	27°M18	19°M 8	7°Y55	T 30

Delta T = 06m52s

Julian Calendar

# ASTRODIENST EPHEMERIS for the year 1437

## geocentric

MAY 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	15 9 55	18°51'24	1°9' 9	19°R28	17°Y49	5°H38	16°R45	4°Y26	19°B44	26°L46	14°E14	28°A14	27°A15	19°B15	7°Y58	W 1
T 2	15 13 52	19°49'09	13° 9	18°B53	19° 1	6°21	16°M38	4°32	19°48	26°46	14°15	28°15	27°11	19°22	8° 1	T 2
F 3	15 17 48	20°46'52	25° 2	18°18	20°13	7° 5	16°30	4°38	19°51	26°46	14°16	28°R16	27° 8	19°28	8° 4	F 3
S 4	15 21 45	21°44'35	6°B51	17°44	21°25	7°48	16°22	4°44	19°55	26°46	14°18	28°15	27° 5	19°35	8° 7	S 4
S 5	15 25 41	22°42'16	18°38	17°12	22°37	8°31	16°15	4°50	19°58	26°46	14°19	28°14	27° 2	19°42	8° 9	S 5
M 6	15 29 38	23°39'55	0°H27	16°41	23°49	9°15	16° 7	4°56	20° 2	26°46	14°20	28°11	26°59	19°48	8°12	M 6
T 7	15 33 35	24°37'34	12°18	16°12	25° 1	9°58	16° 0	5° 2	20° 5	26°47	14°21	28° 8	26°56	19°55	8°15	T 7
W 8	15 37 31	25°35'11	24°14	15°47	26°13	10°41	15°52	5° 8	20° 9	26°47	14°22	28° 3	26°52	20° 2	8°18	W 8
T 9	15 41 28	26°32'47	6°E17	15°25	27°25	11°24	15°45	5°13	20°12	26°47	14°23	27°58	26°49	20° 8	8°20	T 9
F 10	15 45 24	27°30'21	18°29	15° 6	28°37	12° 7	15°37	5°19	20°16	26°48	14°24	27°54	26°46	20°15	8°23	F 10
S 11	15 49 21	28°27'54	0°E54	14°51	29°49	12°50	15°30	5°24	20°19	26°48	14°25	27°50	26°43	20°22	8°26	S 11
S 12	15 53 17	29°25'26	13°34	14°40	1°B 1	13°33	15°23	5°30	20°23	26°48	14°27	27°48	26°40	20°28	8°28	S 12
M13	15 57 14	0°H22'56	26°32	14°33	2°13	14°16	15°16	5°35	20°26	26°49	14°28	27°D47	26°36	20°35	8°31	M13
T 14	16 1 10	1°20'25	9°H51	14°D31	3°26	14°59	15° 8	5°41	20°30	26°49	14°29	27°47	26°33	20°41	8°34	T 14
W15	16 5 7	2°17'53	23°33	14°33	4°38	15°42	15° 1	5°46	20°33	26°50	14°30	27°48	26°30	20°48	8°36	W15
T 16	16 9 4	3°15'19	7°A39	14°40	5°50	16°25	14°54	5°51	20°36	26°50	14°31	27°49	26°27	20°55	8°38	T 16
F 17	16 13 0	4°12'44	22°10	14°51	7° 2	17° 8	14°48	5°56	20°40	26°51	14°33	27°R50	26°24	21° 1	8°41	F 17
S 18	16 16 57	5°10'08	7°M 1	15° 6	8°14	17°50	14°41	6° 1	20°43	26°51	14°34	27°50	26°21	21° 8	8°43	S 18
S 19	16 20 53	6° 7'30	22° 7	15°26	9°27	18°33	14°34	6° 6	20°47	26°52	14°35	27°48	26°17	21°15	8°46	S 19
M20	16 24 50	7° 4'52	7°A20	15°51	10°39	19°15	14°27	6°11	20°50	26°53	14°37	27°45	26°14	21°21	8°48	M20
T 21	16 28 46	8° 2'13	22°28	16°20	11°51	19°58	14°21	6°16	20°54	26°53	14°38	27°40	26°11	21°28	8°50	T 21
W22	16 32 43	8°59'34	7°B23	16°53	13° 4	20°40	14°15	6°21	20°57	26°54	14°39	27°34	26° 8	21°35	8°52	W22
T 23	16 36 39	9°56'53	21°57	17°30	14°16	21°23	14° 8	6°26	21° 0	26°55	14°41	27°28	26° 5	21°41	8°55	T 23
F 24	16 40 36	10°54'12	6°A 4	18°11	15°28	22° 5	14° 2	6°30	21° 4	26°56	14°42	27°22	26° 1	21°48	8°57	F 24
S 25	16 44 33	11°51'30	19°42	18°56	16°41	22°47	13°56	6°35	21° 7	26°57	14°43	27°18	25°58	21°55	8°59	S 25
S 26	16 48 29	12°48'48	2°H52	19°45	17°53	23°29	13°50	6°39	21°10	26°57	14°45	27°16	25°55	22° 1	9° 1	S 26
M27	16 52 26	13°46'06	15°36	20°38	19° 6	24°12	13°44	6°44	21°14	26°58	14°46	27°D16	25°52	22° 8	9° 3	M27
T 28	16 56 22	14°43'23	28° 0	21°35	20°18	24°54	13°39	6°48	21°17	26°59	14°47	27°16	25°49	22°15	9° 5	T 28
W29	17 0 19	15°40'39	10°Y 7	22°35	21°31	25°36	13°33	6°52	21°20	27° 0	14°49	27°18	25°46	22°21	9° 7	W29
T 30	17 4 15	16°37'56	22° 3	23°39	22°43	26°17	13°28	6°56	21°23	27° 1	14°50	27°R19	25°42	22°28	9° 8	T 30
F 31	17 8 12	17°H35'12	3°B52	24°B47	23°B56	26°H59	13°M22	7°Y 0	21°B27	27°L 2	14°E52	27°A19	25°A39	22°B35	9°Y10	F 31

Delta T = 06m52s

Julian Calendar 1 May 1437 == Greg. Calendar 10 May 1437

JUNE 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	17 12 8	18°H32'28	15°B39	25°B57	25°B 8	27°H41	13°R17	7°Y 4	21°B30	27°L 3	14°E53	27°R17	25°A36	22°B41	9°Y12	S 1
S 2	17 16 5	19°29'43	27°26	27°12	26°21	28°22	13°M12	7° 8	21°33	27° 4	14°55	27°A13	25°33	22°48	9°14	S 2
M 3	17 20 2	20°26'58	9°H18	28°30	27°34	29° 4	13° 7	7°12	21°36	27° 5	14°56	27° 6	25°30	22°55	9°15	M 3
T 4	17 23 58	21°24'12	21°16	29°51	28°46	29°45	13° 3	7°16	21°39	27° 6	14°58	26°58	25°27	23° 1	9°17	T 4
W 5	17 27 55	22°21'27	3°E21	1°H15	29°59	0°Y27	12°58	7°20	21°42	27° 8	14°59	26°48	25°23	23° 8	9°19	W 5
T 6	17 31 51	23°18'40	15°36	2°43	1°H12	1° 8	12°54	7°23	21°46	27° 9	15° 1	26°38	25°20	23°15	9°20	T 6
F 7	17 35 48	24°15'54	28° 0	4°14	2°24	1°49	12°50	7°27	21°49	27°10	15° 2	26°28	25°17	23°21	9°22	F 7
S 8	17 39 44	25°13'07	10°E36	5°48	3°37	2°30	12°46	7°30	21°52	27°11	15° 4	26°19	25°14	23°28	9°23	S 8
S 9	17 43 41	26°10'19	23°24	7°26	4°50	3°11	12°42	7°33	21°55	27°12	15° 5	26°13	25°11	23°35	9°24	S 9
M10	17 47 37	27° 7'31	6°H26	9° 6	6° 2	3°51	12°38	7°37	21°58	27°14	15° 7	26° 9	25° 7	23°41	9°26	M10
T 11	17 51 34	28° 4'42	19°44	10°50	7°15	4°32	12°34	7°40	22° 1	27°15	15° 8	26° 7	25° 4	23°48	9°27	T 11
W12	17 55 31	29° 1'53	3°A21	12°37	8°28	5°13	12°31	7°43	22° 4	27°16	15°10	26°D 6	25° 1	23°55	9°28	W12
T 13	17 59 27	29°59'03	17°17	14°26	9°41	5°53	12°28	7°46	22° 7	27°18	15°11	26° 7	24°58	24° 1	9°29	T 13
F 14	18 3 24	0°E56'13	1°M33	16°18	10°54	6°33	12°25	7°48	22°10	27°19	15°13	26°R 7	24°55	24° 8	9°31	F 14
S 15	18 7 20	1°53'23	16° 7	18°14	12° 7	7°13	12°22	7°51	22°12	27°20	15°14	26° 6	24°52	24°15	9°32	S 15
S 16	18 11 17	2°50'32	0°A56	20°11	13°19	7°53	12°19	7°54	22°15	27°22	15°16	26° 2	24°48	24°21	9°33	S 16
M17	18 15 13	3°47'42	15°54	22°11	14°32	8°33	12°17	7°56	22°18	27°23	15°18	25°56	24°45	24°28	9°34	M17
T 18	18 19 10	4°44'51	0°B53	24°13	15°45	9°13	12°14	7°59	22°21	27°25	15°19	25°47	24°42	24°35	9°35	T 18
W19	18 23 7	5°42'00	15°42	26°17	16°58	9°53	12°12	8° 1	22°24	27°26	15°21	25°37	24°39	24°41	9°35	W19
T 20	18 27 3	6°39'09	0°A14	28°22	18°11	10°32	12°10	8° 4	22°26	27°28	15°22	25°27	24°36	24°48	9°36	T 20
F 21	18 31 0	7°36'19	14°23	0°E29	19°24	11°12	12° 8	8° 6	22°29	27°29	15°24	25°18	24°33	24°55	9°37	F 21
S 22	18 34 56	8°33'29	28° 4	2°37	20°37	11°51	12° 7	8° 8	22°32	27°31	15°26	25°10	24°29	25° 1	9°38	S 22
S 23	18 38 53	9°30'39	11°H17	4°46	21°50	12°30	12° 5	8°10	22°34	27°33	15°27	25° 5	24°26	25° 8	9°38	S 23
M24	18 42 49	10°27'49	24° 4	6°55	23° 3	13° 9	12° 4	8°12	22°37	27°34	15°29	25° 2	24°23	25°15	9°39	M24
T 25	18 46 46	11°25'01	6°Y29	9° 5	24°17	13°48	12° 3	8°13	22°40	27°36	15°30	25° 1	24°20	25°21	9°39	T 25
W26	18 50 42	12°22'12	18°36	11°14	25°30	14°26	12° 2	8°15	22°42	27°37	15°32	25° 1	24°17	25°28	9°40	W26
T 27	18 54 39	13°19'24	0°B32	13°23	26°43	15° 5	12° 1	8°17	22°45	27°39	15°34	25° 1	24°13	25°35	9°40	T 27
F 28	18 58 36	14°16'37	12°21	15°31	27°56	15°43	12° 0	8°18	22°47	27°41	15°35	25° 0	24°10	25°41	9°41	F 28
S 29	19 2 32	15°13'51	24° 9	17°39	29° 9	16°21	12° 0	8°20	22°50	27°43	15°37	24°57	24° 7	25°48	9°41	S 29
S 30	19 6 29	16°E11'05	5°H59	19°E46	0°E23	16°Y59	12°M 0	8°Y21	22°B52	27°L44	15°E38	24°A51	24°A 4	25°B55	9°Y41	S 30

Delta T = 06m51s

Julian Calendar

ASTRODIENST EPHEMERIS for the year 1437  
geocentric

JULY 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	19 10 25	17°58' 820	17°11' 56	21°51' 21	1°36' 17	17°37' 12	12°0' 0	8°22' 22	8°54' 22	27°46' 15	15°40' 24	24°R43	24°1' 24	26°8' 26	9°42' 9	M 1
T 2	19 14 22	18° 5'35	0°2' 23	23°55' 2°49	18°15' 12	12°0' 0	8°23' 22	27°48' 27	15°42' 24	23°58' 23	26°8' 26	9°42' 9	T 2			T 2
W 3	19 18 18	19° 2'51	12°20' 25	58' 4° 3	18°52' 12	0' 0	8°24' 22	27°50' 27	15°43' 24	20' 23	26°15' 26	9°42' 9	W 3			W 3
T 4	19 22 15	20° 0'08	24°49' 27	5°16' 19	29' 12	1' 0	8°25' 23	27°52' 27	15°45' 24	6' 23	26°21' 26	9°42' 9	T 4			T 4
F 5	19 26 11	20°57'25	7°30' 29	59' 6°29	20° 6	12° 2	8°26' 23	27°53' 27	15°46' 23	54' 23	26°28' 9	42' 9	F 5			F 5
S 6	19 30 8	21°54'42	20°23' 1	57' 7°43	20°43' 12	2' 0	8°26' 23	27°55' 27	15°48' 23	42' 23	26°35' 9	42' 9	S 6			S 6
S 7	19 34 5	22°52'00	3°27' 3	53' 8°56	21°20' 12	3' 0	8°27' 23	27°57' 27	15°50' 23	34' 23	26°41' 9	42' 9	S 7			S 7
M 8	19 38 1	23°49'18	16°43' 5	48' 10°10	21°56' 12	5' 0	8°27' 23	27°59' 27	15°51' 23	28' 23	26°48' 9	42' 9	M 8			M 8
T 9	19 41 58	24°46'37	0°11' 7	41' 11°23	22°32' 12	6' 0	8°28' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	T 9			T 9
W10	19 45 54	25°43'57	13°51' 9	33' 12°37	23° 8	12° 8	8°28' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	W10			W10
T 11	19 49 51	26°41'16	27°44' 11	22' 13°50	23°44' 12	10' 0	8°28' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	T 11			T 11
F 12	19 53 47	27°38'37	11°18' 50	13°10' 15	4' 24	19' 12	8°28' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	F 12			F 12
S 13	19 57 44	28°35'57	26° 8	14°57' 16	17' 24	55' 12	8°28' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	S 13			S 13
S 14	20 1 40	29°33'19	10°17' 37	16°41' 17	31' 25	30' 12	8°28' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	S 14			S 14
M15	20 5 37	0°30'41	25°13' 18	24' 18°45	26° 5	12° 19	8°28' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	M15			M15
T 16	20 9 34	1°28'04	9°34' 20	5' 19°58	26°39' 12	21' 0	8°27' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	T 16			T 16
W17	20 13 30	2°25'27	24°19' 21	45' 21°12	27°13' 12	24' 0	8°27' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	W17			W17
T 18	20 17 27	3°22'52	8°36' 23	23' 22°26	27°48' 12	27' 0	8°26' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	T 18			T 18
F 19	20 21 23	4°20'17	22°34' 24	59' 23°40	28°21' 12	30' 0	8°26' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	F 19			F 19
S 20	20 25 20	5°17'44	6°18' 26	34' 24°53	28°55' 12	34' 0	8°25' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	S 20			S 20
S 21	20 29 16	6°15'12	19°19' 28	7' 26° 7	29°28' 12	37' 0	8°24' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	S 21			S 21
M22	20 33 13	7°12'40	2°15' 29	38' 27°21	0°1' 12	41' 0	8°23' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	M22			M22
T 23	20 37 9	8°10'11	14°31' 1	18' 28°35	0°34' 12	45' 0	8°22' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	T 23			T 23
W24	20 41 6	9° 7'42	26°40' 2	36' 29°49	1° 6	12° 49	8°21' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	W24			W24
T 25	20 45 3	10° 5'16	8°37' 4	2' 1°13	1°38' 12	53' 0	8°19' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	T 25			T 25
F 26	20 48 59	11° 2'50	20°28' 5	27' 2°17	2°10' 12	57' 0	8°18' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	F 26			F 26
S 27	20 52 56	12° 0'26	2°11' 6	50' 3°31	2°42' 13	2' 0	8°17' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	S 27			S 27
S 28	20 56 52	12°58'04	14°11' 8	11' 4°45	3°13' 13	6' 0	8°15' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	S 28			S 28
M29	21 0 49	13°55'43	26°12' 9	30' 5°59	3°44' 13	11' 0	8°13' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	M29			M29
T 30	21 4 45	14°53'24	8°26' 10	48' 7°13	4°14' 13	16' 0	8°12' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	T 30			T 30
W31	21 8 42	15°51'06	20°54' 12	18' 8°12	4°44' 13	21' 0	8°10' 23	27°59' 27	15°51' 23	24' 23	26°55' 9	42' 9	W31			W31

Delta T = 06m51s

Julian Calendar 1 July 1437 == Greg. Calendar 10 July 1437

AUGUST 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	21 12 38	16♌48°49	3♌37	13♍17	9♌41	5♌14	13♍27	8°R 8	23♌48	28♌49	16♌28	21°R24	22♌22	29♌28	9°R22	T 1
F 2	21 16 35	17°46'34	16°37	14°28	10°55	5°44	13°32	8°Y 6	23°49	28°51	16°29	21♌13	22°19	29°35	9°Y20	F 2
S 3	21 20 32	18°44'21	29°51	15°38	12° 9	6°13	13°38	8° 4	23°50	28°53	16°31	21° 4	22°16	29°41	9°19	S 3
S 4	21 24 28	19°42'08	13♍18	16°45	13°23	6°41	13°44	8° 1	23°50	28°55	16°32	20°56	22°13	29°48	9°17	S 4
M 5	21 28 25	20°39'57	26°56	17°50	14°38	7°10	13°50	7°59	23°51	28°57	16°33	20°51	22°10	29°55	9°16	M 5
T 6	21 32 21	21°37'48	10♌42	18°53	15°52	7°37	13°56	7°57	23°52	29° 0	16°35	20°49	22° 6	0♐1	9°14	T 6
W 7	21 36 18	22°35'39	24°37	19°53	17° 6	8° 5	14° 2	7°54	23°53	29° 2	16°36	20°D49	22° 3	0° 8	9°12	W 7
T 8	21 40 14	23°33'32	8♍37	20°50	18°20	8°32	14° 8	7°51	23°53	29° 4	16°37	20°49	22° 0	0°15	9°11	T 8
F 9	21 44 11	24°31'26	22°43	21°45	19°35	8°59	14°15	7°49	23°54	29° 6	16°39	20°R50	21°57	0°21	9° 9	F 9
S 10	21 48 7	25°29'22	6♌54	22°36	20°49	9°25	14°21	7°46	23°55	29° 9	16°40	20°49	21°54	0°28	9° 7	S 10
S 11	21 52 4	26°27'18	21° 7	23°25	22° 3	9°51	14°28	7°43	23°55	29°11	16°41	20°47	21°50	0°35	9° 5	S 11
M12	21 56 0	27°25'16	5♌20	24°10	23°18	10°16	14°35	7°40	23°56	29°13	16°43	20°42	21°47	0°41	9° 3	M12
T 13	21 59 57	28°23'16	19°30	24°51	24°32	10°41	14°42	7°37	23°56	29°15	16°44	20°36	21°44	0°48	9° 1	T 13
W14	22 3 54	29°21'17	3♌34	25°29	25°46	11° 5	14°49	7°34	23°57	29°17	16°45	20°28	21°41	0°55	8°59	W14
T 15	22 7 50	0♐19'19	17°26	26° 3	27° 1	11°29	14°57	7°31	23°57	29°20	16°46	20°20	21°38	1° 2	8°57	T 15
F 16	22 11 47	1°17'23	1♌3	26°32	28°15	11°53	15° 4	7°27	23°57	29°22	16°48	20°12	21°35	1° 8	8°55	F 16
S 17	22 15 43	2°15'28	14°22	26°57	29°30	12°16	15°12	7°24	23°57	29°24	16°49	20° 5	21°31	1°15	8°53	S 17
S 18	22 19 40	3°13'36	27°21	27°17	0♐44	12°38	15°19	7°21	23°58	29°26	16°50	20° 1	21°28	1°22	8°51	S 18
M19	22 23 36	4°11'45	10°Y 2	27°31	1°59	13° 0	15°27	7°17	23°58	29°29	16°51	19°59	21°25	1°28	8°49	M19
T 20	22 27 33	5° 9'56	22°24	27°41	3°13	13°21	15°35	7°14	23°58	29°31	16°52	19°D58	21°22	1°35	8°47	T 20
W21	22 31 29	6° 8'09	4♌32	27°R44	4°28	13°42	15°43	7°10	23°R58	29°33	16°53	19°59	21°19	1°42	8°45	W21
T 22	22 35 26	7° 6'25	16°29	27°42	5°42	14° 3	15°52	7° 6	23°58	29°35	16°54	20° 1	21°16	1°48	8°42	T 22
F 23	22 39 23	8° 4'42	28°21	27°33	6°57	14°22	16° 0	7° 2	23°58	29°37	16°56	20° 2	21°12	1°55	8°40	F 23
S 24	22 43 19	9° 3'01	10♐11	27°18	8°11	14°41	16° 9	6°59	23°58	29°40	16°57	20°R 2	21° 9	2° 2	8°38	S 24
S 25	22 47 16	10° 1'23	22° 6	26°56	9°26	15° 0	16°17	6°55	23°58	29°42	16°58	20° 1	21° 6	2° 8	8°35	S 25
M26	22 51 12	10°59'47	4♌9	26°27	10°41	15°18	16°26	6°51	23°57	29°44	16°59	19°59	21° 3	2°15	8°33	M26
T 27	22 55 9	11°58'12	16°26	25°52	11°55	15°35	16°35	6°47	23°57	29°46	17° 0	19°55	21° 0	2°22	8°30	T 27
W28	22 59 5	12°56'40	29° 0	25°10	13°10	15°52	16°44	6°43	23°57	29°48	17° 1	19°50	20°56	2°28	8°28	W28
T 29	23 3 2	13°55'10	11♌53	24°23	14°25	16° 8	16°53	6°38	23°56	29°51	17° 2	19°44	20°53	2°35	8°25	T 29
F 30	23 6 58	14°53'42	25° 6	23°30	15°39	16°23	17° 2	6°34	23°56	29°53	17° 3	19°38	20°50	2°42	8°23	F 30
S 31	23 10 55	15♍52'17	8♍39	22♍33	16♍54	16♌38	17♍11	6°Y30	23♌55	29♌55	17♌4	19♌32	20♌47	2♐48	8°Y20	S 31

Delta T = 06m51s

Julian Calendar

# ASTRODIENST EPHEMERIS for the year 1437

## geocentric

SEPTEMBER 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	23 14 52	16 <sup>h</sup> 50'53	22 <sup>h</sup> 29	21°R32	18 <sup>h</sup> 9	16 <sup>h</sup> 52	17 <sup>h</sup> 21	6°R26	23°R55	29 <sup>h</sup> 257	17 <sup>h</sup> 5	19°R29	20 <sup>h</sup> 44	2 <sup>h</sup> 1155	8°R18	S 1
M 2	23 18 48	17°49'30	6 <sup>h</sup> 32	20 <sup>h</sup> 28	19°23	17°5	17°30	6°Y21	23°R54	29°59	17°6	19°D26	20°41	3°2	8°Y15	M 2
T 3	23 22 45	18°48'10	20°45	19°24	20°38	17°17	17°40	6°17	23°54	0 <sup>h</sup> 1	17°6	19°D26	20°37	3°8	8°13	T 3
W 4	23 26 41	19°46'52	5 <sup>h</sup> 4	18°21	21°53	17°29	17°49	6°13	23°53	0°4	17°7	19°27	20°34	3°15	8°10	W 4
T 5	23 30 38	20°45'35	19°24	17°19	23°8	17°40	17°59	6°8	23°52	0°6	17°8	19°28	20°31	3°22	8°7	T 5
F 6	23 34 34	21°44'21	3 <sup>h</sup> 42	16°21	24°23	17°51	18°9	6°4	23°52	0°8	17°9	19°29	20°28	3°28	8°5	F 6
S 7	23 38 31	22°43'08	17°55	15°29	25°37	18°0	18°19	5°59	23°51	0°10	17°10	19°R30	20°25	3°35	8°2	S 7
S 8	23 42 27	23°41'56	2 <sup>h</sup> 3	14°43	26°52	18°9	18°29	5°55	23°50	0°12	17°11	19°30	20°22	3°42	7°59	S 8
M 9	23 46 24	24°40'47	16°1	14°5	28°7	18°17	18°39	5°50	23°49	0°14	17°11	19°29	20°18	3°48	7°57	M 9
T 10	23 50 21	25°39'39	29°50	13°36	29°22	18°24	18°50	5°45	23°48	0°16	17°12	19°26	20°15	3°55	7°54	T 10
W 11	23 54 17	26°38'33	13 <sup>h</sup> 28	13°16	0 <sup>h</sup> 37	18°30	19°0	5°41	23°47	0°18	17°13	19°23	20°12	4°2	7°51	W 11
T 12	23 58 14	27°37'29	26°53	13°D 7	1°51	18°36	19°11	5°36	23°46	0°20	17°13	19°20	20°9	4°9	7°48	T 12
F 13	0 2 10	28°36'26	10 <sup>h</sup> 8	13°8	3°6	18°41	19°21	5°31	23°45	0°22	17°14	19°17	20°6	4°15	7°46	F 13
S 14	0 6 7	29°35'26	23°2	13°19	4°21	18°44	19°32	5°27	23°44	0°24	17°15	19°14	20°2	4°22	7°43	S 14
S 15	0 10 3	0 <sup>h</sup> 34'27	5°Y44	13°40	5°36	18°47	19°43	5°22	23°43	0°26	17°15	19°13	19°59	4°29	7°40	S 15
M 16	0 14 0	1°33'31	18°12	14°11	6°51	18°50	19°54	5°17	23°41	0°28	17°16	19°D12	19°56	4°35	7°37	M 16
T 17	0 17 56	2°32'37	0 <sup>h</sup> 27	14°51	8°6	18°51	20°5	5°13	23°40	0°30	17°17	19°13	19°53	4°42	7°34	T 17
W 18	0 21 53	3°31'45	12°31	15°40	9°21	18°R51	20°16	5°8	23°39	0°32	17°17	19°14	19°50	4°49	7°32	W 18
T 19	0 25 49	4°30'55	24°27	16°36	10°36	18°51	20°27	5°3	23°37	0°34	17°18	19°15	19°47	4°55	7°29	T 19
F 20	0 29 46	5°30'08	6 <sup>h</sup> 18	17°40	11°50	18°49	20°38	4°58	23°36	0°36	17°18	19°16	19°43	5°2	7°26	F 20
S 21	0 33 43	6°29'23	18°8	18°51	13°5	18°47	20°49	4°54	23°34	0°38	17°19	19°17	19°40	5°9	7°23	S 21
S 22	0 37 39	7°28'40	0 <sup>h</sup> 2	20°7	14°20	18°44	21°0	4°49	23°33	0°40	17°19	19°18	19°37	5°15	7°20	S 22
M 23	0 41 36	8°27'59	12°4	21°28	15°35	18°40	21°12	4°44	23°31	0°41	17°19	19°R18	19°34	5°22	7°17	M 23
T 24	0 45 32	9°27'21	24°20	22°53	16°50	18°35	21°23	4°39	23°30	0°43	17°20	19°18	19°31	5°29	7°15	T 24
W 25	0 49 29	10°26'46	6 <sup>h</sup> 53	24°22	18°5	18°29	21°35	4°35	23°28	0°45	17°20	19°17	19°27	5°35	7°12	W 25
T 26	0 53 25	11°26'12	19°47	25°54	19°20	18°22	21°47	4°30	23°27	0°47	17°21	19°16	19°24	5°42	7°9	T 26
F 27	0 57 22	12°25'41	3 <sup>h</sup> 4	27°28	20°35	18°15	21°58	4°25	23°25	0°49	17°21	19°15	19°21	5°49	7°6	F 27
S 28	1 1 18	13°25'12	16°46	29°5	21°50	18°6	22°10	4°21	23°23	0°50	17°21	19°14	19°18	5°55	7°3	S 28
S 29	1 5 15	14°24'45	0 <sup>h</sup> 51	0 <sup>h</sup> 43	23°5	17°57	22°22	4°16	23°21	0°52	17°22	19°14	19°15	6°2	7°1	S 29
M 30	1 9 12	15°24'21	15°15	2 <sup>h</sup> 22	24°20	17°47	22°34	4°Y11	23°R20	0 <sup>h</sup> 54	17°22	19°D14	19°12	6°11	6°Y58	M 30

Delta T = 06m51s

Julian Calendar 1 Sept. 1437 == Greg. Calendar 10 Sept. 1437

OCTOBER 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	1 13 8	16 <sup>h</sup> 23'58	29 <sup>h</sup> 54	4 <sup>h</sup> 3	25°R35	17°R35	22°M46	4°R 7	23°R18	0 <sup>h</sup> 56	17°22	19°R14	19°R 8	6°116	6°R55	T 1
W 2	1 17 5	17°23'38	14 <sup>h</sup> 40	5°44	26°50	17°R23	22°58	4°Y 2	23°R16	0°57	17°22	19°14	19°5	6°22	6°Y52	W 2
T 3	1 21 1	18°23'19	29°26	7°26	28°5	17°11	23°10	3°58	23°14	0°59	17°22	19°14	19°2	6°29	6°49	T 3
F 4	1 24 58	19°23'02	14 <sup>h</sup> 7	9°8	29°20	16°57	23°22	3°53	23°12	1°1	17°23	19°R14	18°59	6°36	6°47	F 4
S 5	1 28 54	20°22'48	28°35	10°50	0 <sup>h</sup> 135	16°43	23°34	3°49	23°10	1°2	17°23	19°14	18°56	6°42	6°44	S 5
S 6	1 32 51	21°22'34	12 <sup>h</sup> 38	12°32	1°50	16°28	23°47	3°44	23°8	1°4	17°23	19°14	18°53	6°49	6°41	S 6
M 7	1 36 47	22°22'23	26°44	14°14	3°5	16°12	23°59	3°40	23°6	1°5	17°23	19°D14	18°49	6°56	6°39	M 7
T 8	1 40 44	23°22'13	10 <sup>h</sup> 22	15°56	4°20	15°55	24°11	3°36	23°4	1°7	17°23	19°14	18°46	7°2	6°36	T 8
W 9	1 44 41	24°22'05	23°42	17°37	5°35	15°38	24°24	3°31	23°2	1°8	17°23	19°14	18°43	7°9	6°33	W 9
T 10	1 48 37	25°21'58	6 <sup>h</sup> 45	19°19	6°50	15°20	24°36	3°27	23°0	1°10	17°R23	19°15	18°40	7°16	6°31	T 10
F 11	1 52 34	26°21'53	19°34	20°59	8°5	15°2	24°49	3°23	22°58	1°11	17°23	19°16	18°37	7°22	6°28	F 11
S 12	1 56 30	27°21'50	2°Y10	22°40	9°20	14°43	25°2	3°19	22°55	1°13	17°23	19°16	18°33	7°29	6°25	S 12
S 13	2 0 27	28°21'49	14°34	24°20	10°35	14°24	25°14	3°15	22°53	1°14	17°23	19°R17	18°30	7°36	6°23	S 13
M 14	2 4 23	29°21'49	26°48	26°0	11°50	14°4	25°27	3°11	22°51	1°15	17°23	19°17	18°27	7°42	6°20	M 14
T 15	2 8 20	0 <sup>h</sup> 21'52	8 <sup>h</sup> 53	27°39	13°5	13°44	25°40	3°7	22°49	1°17	17°23	19°16	18°24	7°49	6°18	T 15
W 16	2 12 16	1°21'56	20°51	29°18	14°20	13°24	25°52	3°3	22°46	1°18	17°22	19°15	18°21	7°56	6°15	W 16
T 17	2 16 13	2°22'03	2 <sup>h</sup> 44	0 <sup>h</sup> 56	15°35	13°3	26°5	2°59	22°44	1°19	17°22	19°13	18°18	8°3	6°13	T 17
F 18	2 20 9	3°22'11	14°34	2°34	16°50	12°42	26°18	2°55	22°42	1°21	17°22	19°11	18°14	8°9	6°10	F 18
S 19	2 24 6	4°22'22	26°24	4°11	18°5	12°20	26°31	2°52	22°39	1°22	17°22	19°8	18°11	8°16	6°8	S 19
S 20	2 28 3	5°22'34	8 <sup>h</sup> 18	5°48	19°20	11°59	26°44	2°48	22°37	1°23	17°22	19°6	18°8	8°23	6°5	S 20
M 21	2 31 59	6°22'49	20°19	7°25	20°35	11°37	26°57	2°44	22°35	1°24	17°21	19°5	18°5	8°29	6°3	M 21
T 22	2 35 56	7°23'05	2 <sup>h</sup> 31	9°1	21°50	11°15	27°10	2°41	22°32	1°25	17°21	19°D 4	18°2	8°36	6°1	T 22
W 23	2 39 52	8°23'24	14°59	10°37	23°5	10°54	27°23	2°37	22°30	1°27	17°21	19°4	17°58	8°43	5°58	W 23
T 24	2 43 49	9°23'45	27°47	12°13	24°20	10°32	27°36	2°34	22°27	1°28	17°20	19°5	17°55	8°49	5°56	T 24
F 25	2 47 45	10°24'07	10 <sup>h</sup> 59	13°48	25°35	10°10	27°49	2°31	22°25	1°29	17°20	19°6	17°52	8°56	5°54	F 25
S 26	2 51 42	11°24'32	24°38	15°23	26°50	9°49	28°3	2°28	22°23	1°30	17°20	19°8	17°49	9°3	5°52	S 26
S 27	2 55 38	12°24'58	8 <sup>h</sup> 43	16°57	28°5	9°27	28°16	2°25	22°20	1°31	17°19	19°9	17°46	9°9	5°50	S 27
M 28	2 59 35	13°25'27	23°15	18°32	29°20	9°6	28°29	2°22	22°18	1°32	17°19	19°R 9	17°43	9°16	5°48	M 28
T 29	3 3 32	14°25'57	8 <sup>h</sup> 11	20°6	0 <sup>h</sup> 35	8°45	28°42	2°19	22°15	1°33	17°18	19°8	17°39	9°23	5°45	T 29
W 30	3 7 28	15°26'29	23°13	21°39	1°50	8°25	28°56	2°16	22°13	1°34	17°18	19°6	17°36	9°30	5°43	W 30
T 31	3 11 25	16 <sup>h</sup> 27'02	8 <sup>h</sup> 24	23 <sup>h</sup> 13	3°R 5	8°R 5	29°M 9	2°Y13	22°R10	1°34	17°17	19°R 2	17°33	9°36	5°Y41	T 31

Delta T = 06m51s

Julian Calendar

# ASTRODIENST EPHEMERIS for the year 1437

## geocentric

NOVEMBER 1437 JC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	3 15 21	17 <sup>11</sup> 27'37"	23 <sup>11</sup> 28'	24 <sup>11</sup> 46'	4 <sup>11</sup> 20'	7 <sup>11</sup> R45	29 <sup>11</sup> M22	2 <sup>11</sup> R11	22 <sup>11</sup> R 8	1 <sup>11</sup> M35	17 <sup>11</sup> R17	18 <sup>11</sup> R58	17 <sup>11</sup> Δ30	9 <sup>11</sup> II43	5 <sup>11</sup> R40	F 1
S 2	3 19 18	18 <sup>11</sup> 28'13"	8 <sup>11</sup> 319	26 <sup>11</sup> 19'	5 <sup>11</sup> 35'	7 <sup>11</sup> 826	29 <sup>11</sup> 36'	2 <sup>11</sup> Y 8	22 <sup>11</sup> 8 5	1 <sup>11</sup> 36'	17 <sup>11</sup> 316	18 <sup>11</sup> Δ54	17 <sup>11</sup> 27'	9 <sup>11</sup> 50'	5 <sup>11</sup> Y38	S 2
S 3	3 23 14	19 <sup>11</sup> 28'51"	22 <sup>11</sup> 48'	27 <sup>11</sup> 52'	6 <sup>11</sup> 50'	7 <sup>11</sup> 7	29 <sup>11</sup> 49'	2 <sup>11</sup> 6	22 <sup>11</sup> 3	1 <sup>11</sup> 37'	17 <sup>11</sup> 16'	18 <sup>11</sup> 51'	17 <sup>11</sup> 24'	9 <sup>11</sup> 56'	5 <sup>11</sup> 36'	S 3
M 4	3 27 11	20 <sup>11</sup> 29'29"	6 <sup>11</sup> Δ52	29 <sup>11</sup> 25'	8 <sup>11</sup> 5	6 <sup>11</sup> 49	0 <sup>11</sup> Δ 2	2 <sup>11</sup> 3	22 <sup>11</sup> 0	1 <sup>11</sup> 38'	17 <sup>11</sup> 15'	18 <sup>11</sup> 49'	17 <sup>11</sup> 20'	10 <sup>11</sup> 3	5 <sup>11</sup> 34'	M 4
T 5	3 31 7	21 <sup>11</sup> 30'09"	20 <sup>11</sup> 30	0 <sup>11</sup> Δ57	9 <sup>11</sup> 20	6 <sup>11</sup> 31	0 <sup>11</sup> 16'	2 <sup>11</sup> 1	21 <sup>11</sup> 58	1 <sup>11</sup> 38'	17 <sup>11</sup> 14'	18 <sup>11</sup> D48	17 <sup>11</sup> 17'	10 <sup>11</sup> 10	5 <sup>11</sup> 32'	T 5
W 6	3 35 4	22 <sup>11</sup> 30'50"	3 <sup>11</sup> Δ45	2 <sup>11</sup> 29	10 <sup>11</sup> 35'	6 <sup>11</sup> 15	0 <sup>11</sup> 29	1 <sup>11</sup> 59	21 <sup>11</sup> 55	1 <sup>11</sup> 39	17 <sup>11</sup> 14'	18 <sup>11</sup> 48'	17 <sup>11</sup> 14'	10 <sup>11</sup> 16	5 <sup>11</sup> 30'	W 6
T 7	3 39 1	23 <sup>11</sup> 31'32"	16 <sup>11</sup> 37'	4 <sup>11</sup> 1	11 <sup>11</sup> 50	5 <sup>11</sup> 58	0 <sup>11</sup> 43	1 <sup>11</sup> 57	21 <sup>11</sup> 53	1 <sup>11</sup> 40	17 <sup>11</sup> 13'	18 <sup>11</sup> 50	17 <sup>11</sup> 11'	10 <sup>11</sup> 23	5 <sup>11</sup> 29'	T 7
F 8	3 42 57	24 <sup>11</sup> 32'15"	29 <sup>11</sup> 12	5 <sup>11</sup> 33	13 <sup>11</sup> 4	5 <sup>11</sup> 43	0 <sup>11</sup> 56	1 <sup>11</sup> 55	21 <sup>11</sup> 50	1 <sup>11</sup> 40	17 <sup>11</sup> 12'	18 <sup>11</sup> 51	17 <sup>11</sup> 8	10 <sup>11</sup> 30	5 <sup>11</sup> 27'	F 8
S 9	3 46 54	25 <sup>11</sup> 32'59"	11 <sup>11</sup> Y32	7 <sup>11</sup> 5	14 <sup>11</sup> 19	5 <sup>11</sup> 28	1 <sup>11</sup> 10	1 <sup>11</sup> 53	21 <sup>11</sup> 47	1 <sup>11</sup> 41	17 <sup>11</sup> 12'	18 <sup>11</sup> 53	17 <sup>11</sup> 4	10 <sup>11</sup> 36	5 <sup>11</sup> 26'	S 9
S 10	3 50 50	26 <sup>11</sup> 33'45"	23 <sup>11</sup> 42	8 <sup>11</sup> 36	15 <sup>11</sup> 34	5 <sup>11</sup> 14	1 <sup>11</sup> 23	1 <sup>11</sup> 51	21 <sup>11</sup> 45	1 <sup>11</sup> 41	17 <sup>11</sup> 11'	18 <sup>11</sup> R53	17 <sup>11</sup> 1	10 <sup>11</sup> 43	5 <sup>11</sup> 24	S 10
M 11	3 54 47	27 <sup>11</sup> 34'31"	5 <sup>11</sup> Δ43	10 <sup>11</sup> 7	16 <sup>11</sup> 49	5 <sup>11</sup> 0	1 <sup>11</sup> 36	1 <sup>11</sup> 50	21 <sup>11</sup> 42	1 <sup>11</sup> 42	17 <sup>11</sup> 10'	18 <sup>11</sup> 51	16 <sup>11</sup> 58	10 <sup>11</sup> 50	5 <sup>11</sup> 23	M 11
T 12	3 58 43	28 <sup>11</sup> 35'19"	17 <sup>11</sup> 39	11 <sup>11</sup> 38	18 <sup>11</sup> 4	4 <sup>11</sup> 48	1 <sup>11</sup> 50	1 <sup>11</sup> 48	21 <sup>11</sup> 40	1 <sup>11</sup> 42	17 <sup>11</sup> 9	18 <sup>11</sup> 48	16 <sup>11</sup> 55	10 <sup>11</sup> 57	5 <sup>11</sup> 21	T 12
W 13	4 2 40	29 <sup>11</sup> 36'08"	29 <sup>11</sup> 32	13 <sup>11</sup> 9	19 <sup>11</sup> 19	4 <sup>11</sup> 36	2 <sup>11</sup> 3	1 <sup>11</sup> 47	21 <sup>11</sup> 37	1 <sup>11</sup> 43	17 <sup>11</sup> 9	18 <sup>11</sup> 42	16 <sup>11</sup> 52	11 <sup>11</sup> 3	5 <sup>11</sup> 20	W 13
T 14	4 6 36	0 <sup>11</sup> Δ36'58"	11 <sup>11</sup> II23	14 <sup>11</sup> 40	20 <sup>11</sup> 34	4 <sup>11</sup> 24	2 <sup>11</sup> 17	1 <sup>11</sup> 45	21 <sup>11</sup> 35	1 <sup>11</sup> 43	17 <sup>11</sup> 8	18 <sup>11</sup> 35	16 <sup>11</sup> 49	11 <sup>11</sup> 10	5 <sup>11</sup> 18	T 14
F 15	4 10 33	1 <sup>11</sup> 37'49"	23 <sup>11</sup> 14	16 <sup>11</sup> 10	21 <sup>11</sup> 49	4 <sup>11</sup> 14	2 <sup>11</sup> 31	1 <sup>11</sup> 44	21 <sup>11</sup> 33	1 <sup>11</sup> 43	17 <sup>11</sup> 7	18 <sup>11</sup> 26	16 <sup>11</sup> 45	11 <sup>11</sup> 17	5 <sup>11</sup> 17	F 15
S 16	4 14 30	2 <sup>11</sup> 38'42"	5 <sup>11</sup> Δ 7	17 <sup>11</sup> 40	23 <sup>11</sup> 4	4 <sup>11</sup> 5	2 <sup>11</sup> 44	1 <sup>11</sup> 43	21 <sup>11</sup> 30	1 <sup>11</sup> 44	17 <sup>11</sup> 6	18 <sup>11</sup> 17	16 <sup>11</sup> 42	11 <sup>11</sup> 23	5 <sup>11</sup> 16	S 16
S 17	4 18 26	3 <sup>11</sup> 39'36"	17 <sup>11</sup> 4	19 <sup>11</sup> 9	24 <sup>11</sup> 19	3 <sup>11</sup> 56	2 <sup>11</sup> 58	1 <sup>11</sup> 42	21 <sup>11</sup> 28	1 <sup>11</sup> 44	17 <sup>11</sup> 5	18 <sup>11</sup> 9	16 <sup>11</sup> 39	11 <sup>11</sup> 30	5 <sup>11</sup> 15	S 17
M 18	4 22 23	4 <sup>11</sup> 40'31"	29 <sup>11</sup> 6	20 <sup>11</sup> 38	25 <sup>11</sup> 34	3 <sup>11</sup> 48	3 <sup>11</sup> 11	1 <sup>11</sup> 41	21 <sup>11</sup> 25	1 <sup>11</sup> 44	17 <sup>11</sup> 4	18 <sup>11</sup> 2	16 <sup>11</sup> 36	11 <sup>11</sup> 37	5 <sup>11</sup> 14	M 18
T 19	4 26 19	5 <sup>11</sup> 41'27"	11 <sup>11</sup> Δ19	22 <sup>11</sup> 6	26 <sup>11</sup> 48	3 <sup>11</sup> 41	3 <sup>11</sup> 25	1 <sup>11</sup> 40	21 <sup>11</sup> 23	1 <sup>11</sup> 45	17 <sup>11</sup> 3	17 <sup>11</sup> 57	16 <sup>11</sup> 33	11 <sup>11</sup> 43	5 <sup>11</sup> 13	T 19
W 20	4 30 16	6 <sup>11</sup> 42'25"	23 <sup>11</sup> 44	23 <sup>11</sup> 34	28 <sup>11</sup> 3	3 <sup>11</sup> 35	3 <sup>11</sup> 38	1 <sup>11</sup> 40	21 <sup>11</sup> 20	1 <sup>11</sup> 45	17 <sup>11</sup> 2	17 <sup>11</sup> 54	16 <sup>11</sup> 30	11 <sup>11</sup> 50	5 <sup>11</sup> 12	W 20
T 21	4 34 12	7 <sup>11</sup> 43'23"	6 <sup>11</sup> Δ25	25 <sup>11</sup> 1	29 <sup>11</sup> 18	3 <sup>11</sup> 29	3 <sup>11</sup> 52	1 <sup>11</sup> 39	21 <sup>11</sup> 18	1 <sup>11</sup> 45	17 <sup>11</sup> 1	17 <sup>11</sup> D52	16 <sup>11</sup> 26	11 <sup>11</sup> 57	5 <sup>11</sup> 11	T 21
F 22	4 38 9	8 <sup>11</sup> 44'23"	19 <sup>11</sup> 28	26 <sup>11</sup> 27	0 <sup>11</sup> 33	3 <sup>11</sup> 24	4 <sup>11</sup> 5	1 <sup>11</sup> 39	21 <sup>11</sup> 16	1 <sup>11</sup> 45	17 <sup>11</sup> 1	17 <sup>11</sup> 53	16 <sup>11</sup> 23	12 <sup>11</sup> 4	5 <sup>11</sup> 10	F 22
S 23	4 42 5	9 <sup>11</sup> 45'25"	2 <sup>11</sup> Δ56	27 <sup>11</sup> 52	1 <sup>11</sup> 48	3 <sup>11</sup> 21	4 <sup>11</sup> 19	1 <sup>11</sup> 38	21 <sup>11</sup> 13	1 <sup>11</sup> 45	17 <sup>11</sup> 0	17 <sup>11</sup> 54	16 <sup>11</sup> 20	12 <sup>11</sup> 10	5 <sup>11</sup> 9	S 23
S 24	4 46 2	10 <sup>11</sup> 46'27"	16 <sup>11</sup> 51	29 <sup>11</sup> 16	3 <sup>11</sup> 3	3 <sup>11</sup> 17	4 <sup>11</sup> 32	1 <sup>11</sup> 38	21 <sup>11</sup> 11	1 <sup>11</sup> 45	16 <sup>11</sup> 59	17 <sup>11</sup> R55	16 <sup>11</sup> 17	12 <sup>11</sup> 17	5 <sup>11</sup> 8	S 24
M 25	4 49 59	11 <sup>11</sup> 47'30"	1 <sup>11</sup> M14	0 <sup>11</sup> 339	4 <sup>11</sup> 18	3 <sup>11</sup> 15	4 <sup>11</sup> 46	1 <sup>11</sup> 38	21 <sup>11</sup> 9	1 <sup>11</sup> R45	16 <sup>11</sup> 58	17 <sup>11</sup> 54	16 <sup>11</sup> 14	12 <sup>11</sup> 24	5 <sup>11</sup> 7	M 25
T 26	4 53 55	12 <sup>11</sup> 48'35"	16 <sup>11</sup> 2	1 <sup>11</sup> 59	5 <sup>11</sup> 32	3 <sup>11</sup> 14	4 <sup>11</sup> 59	1 <sup>11</sup> D38	21 <sup>11</sup> 6	1 <sup>11</sup> 45	16 <sup>11</sup> 56	17 <sup>11</sup> 51	16 <sup>11</sup> 10	12 <sup>11</sup> 30	5 <sup>11</sup> 7	T 26
W 27	4 57 52	13 <sup>11</sup> 49'40"	1 <sup>11</sup> Δ10	3 <sup>11</sup> 18	6 <sup>11</sup> 47	3 <sup>11</sup> D13	5 <sup>11</sup> 13	1 <sup>11</sup> 38	21 <sup>11</sup> 4	1 <sup>11</sup> 45	16 <sup>11</sup> 55	17 <sup>11</sup> 45	16 <sup>11</sup> 7	12 <sup>11</sup> 37	5 <sup>11</sup> 6	W 27
T 28	5 1 48	14 <sup>11</sup> 50'47"	16 <sup>11</sup> 29	4 <sup>11</sup> 34	8 <sup>11</sup> 2	3 <sup>11</sup> 13	5 <sup>11</sup> 26	1 <sup>11</sup> 38	21 <sup>11</sup> 2	1 <sup>11</sup> 45	16 <sup>11</sup> 54	17 <sup>11</sup> 38	16 <sup>11</sup> 4	12 <sup>11</sup> 44	5 <sup>11</sup> 5	T 28
F 29	5 5 45	15 <sup>11</sup> 51'54"	1 <sup>11</sup> 348	5 <sup>11</sup> 48	9 <sup>11</sup> 17	3 <sup>11</sup> 14	5 <sup>11</sup> 40	1 <sup>11</sup> 38	20 <sup>11</sup> 59	1 <sup>11</sup> 45	16 <sup>11</sup> 53	17 <sup>11</sup> 29	16 <sup>11</sup> 1	12 <sup>11</sup> 50	5 <sup>11</sup> 5	F 29
S 30	5 9 41	16 <sup>11</sup> Δ53'01"	16 <sup>11</sup> 355	6 <sup>11</sup> 358	10 <sup>11</sup> 332	3 <sup>11</sup> 16	5 <sup>11</sup> Δ53	1 <sup>11</sup> Y39	20 <sup>11</sup> Δ57	1 <sup>11</sup> M45	16 <sup>11</sup> Δ52	17 <sup>11</sup> Δ19	15 <sup>11</sup> Δ58	12 <sup>11</sup> II57	5 <sup>11</sup> Y 4	S 30

Delta T = 06m51s

Julian Calendar 1 Nov. 1437 == Greg. Calendar 10 Nov. 1437

DECEMBER 1437 JC

00:00 UT

Day	Sid.t	☉	☾	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	5 13 38	17 <sup>11</sup> Δ54'09	1 <sup>11</sup> Δ41	8 <sup>11</sup> 3 5	11 <sup>11</sup> 346	3 <sup>11</sup> 819	6 <sup>11</sup> Δ 6	1 <sup>11</sup> Y39	20 <sup>11</sup> R55	1 <sup>11</sup> R45	16 <sup>11</sup> R51	17 <sup>11</sup> R11	15 <sup>11</sup> Δ55	13 <sup>11</sup> II 4	5 <sup>11</sup> R 4	S 1
M 2	5 17 35	18 <sup>11</sup> 55'18	15 <sup>11</sup> 59	9 <sup>11</sup> 7	13 <sup>11</sup> 1	3 <sup>11</sup> 22	6 <sup>11</sup> 20	1 <sup>11</sup> 40	20 <sup>11</sup> Δ53	1 <sup>11</sup> M44	16 <sup>11</sup> Δ50	17 <sup>11</sup> Δ 4	15 <sup>11</sup> 51	13 <sup>11</sup> 11	5 <sup>11</sup> Y 4	M 2
T 3	5 21 31	19 <sup>11</sup> 56'26	29 <sup>11</sup> 47	10 <sup>11</sup> 5	14 <sup>11</sup> 16	3 <sup>11</sup> 26	6 <sup>11</sup> 33	1 <sup>11</sup> 41	20 <sup>11</sup> 51	1 <sup>11</sup> 44	16 <sup>11</sup> 49	17 <sup>11</sup> 0	15 <sup>11</sup> 48	13 <sup>11</sup> 17	5 <sup>11</sup> 3	T 3
W 4	5 25 28	20 <sup>11</sup> 57'35	13 <sup>11</sup> Δ 6	10 <sup>11</sup> 56	15 <sup>11</sup> 31	3 <sup>11</sup> 31	6 <sup>11</sup> 47	1 <sup>11</sup> 42	20 <sup>11</sup> 49	1 <sup>11</sup> 44	16 <sup>11</sup> 48	16 <sup>11</sup> 58	15 <sup>11</sup> 45	13 <sup>11</sup> 24	5 <sup>11</sup> 3	W 4
T 5	5 29 24	21 <sup>11</sup> 58'44	25 <sup>11</sup> 59	11 <sup>11</sup> 42	16 <sup>11</sup> 45	3 <sup>11</sup> 37	7 <sup>11</sup> 0	1 <sup>11</sup> 43	20 <sup>11</sup> 47	1 <sup>11</sup> 44	16 <sup>11</sup> 47	16 <sup>11</sup> D57	15 <sup>11</sup> 42	13 <sup>11</sup> 31	5 <sup>11</sup> 3	T 5
F 6	5 33 21	22 <sup>11</sup> 59'53	8 <sup>11</sup> Y30	12 <sup>11</sup> 20	18 <sup>11</sup> 0	3 <sup>11</sup> 43	7 <sup>11</sup> 13	1 <sup>11</sup> 44	20 <sup>11</sup> 45	1 <sup>11</sup> 43	16 <sup>11</sup> 45	16 <sup>11</sup> 58	15 <sup>11</sup> 39	13 <sup>11</sup> 37	5 <sup>11</sup> 3	F 6
S 7	5 37 17	24 <sup>11</sup> 1'02	20 <sup>11</sup> 44	12 <sup>11</sup> 50	19 <sup>11</sup> 15	3 <sup>11</sup> 50	7 <sup>11</sup> 26	1 <sup>11</sup> 45	20 <sup>11</sup> 43	1 <sup>11</sup> 43	16 <sup>11</sup> 44	16 <sup>11</sup> R58	15 <sup>11</sup> 36	13 <sup>11</sup> 44	5 <sup>11</sup> D 3	S 7
S 8	5 41 14	25 <sup>11</sup> 2'11	2 <sup>11</sup> Δ46	13 <sup>11</sup> 10	20 <sup>11</sup> 30	3 <sup>11</sup> 58	7 <sup>11</sup> 40	1 <sup>11</sup> 46	20 <sup>11</sup> 41	1 <sup>11</sup> 42	16 <sup>11</sup> 43	16 <sup>11</sup> 57	15 <sup>11</sup> 32	13 <sup>11</sup> 51	5 <sup>11</sup> 3	S 8
M 9	5 45 10	26 <sup>11</sup> 3'20	14 <sup>11</sup> 40	13 <sup>11</sup> R21	21 <sup>11</sup> 44	4 <sup>11</sup> 6	7 <sup>11</sup> 53	1 <sup>11</sup> 47	20 <sup>11</sup> 39	1 <sup>11</sup> 42	16 <sup>11</sup> 42	16 <sup>11</sup> 53	15 <sup>11</sup> 29	13 <sup>11</sup> 57	5 <sup>11</sup> 3	M 9
T 10	5 49 7	27 <sup>11</sup> 4'30	26 <sup>11</sup> 31	13 <sup>11</sup> 21	22 <sup>11</sup> 59	4 <sup>11</sup> 15	8 <sup>11</sup> 6	1 <sup>11</sup> 49	20 <sup>11</sup> 37	1 <sup>11</sup> 41	16 <sup>11</sup> 41	16 <sup>11</sup> 47	15 <sup>11</sup> 26	14 <sup>11</sup> 4	5 <sup>11</sup> 3	T 10
W 11	5 53 3	28 <sup>11</sup> 5'39	8 <sup>11</sup> II20	13 <sup>11</sup> 9	24 <sup>11</sup> 13	4 <sup>11</sup> 24	8 <sup>11</sup> 19	1 <sup>11</sup> 51	20 <sup>11</sup> 35	1 <sup>11</sup> 41	16 <sup>11</sup> 39	16 <sup>11</sup> 37	15 <sup>11</sup> 23	14 <sup>11</sup> 11	5 <sup>11</sup> 3	W 11
T 12	5 57 0	29 <sup>11</sup> 6'49	20 <sup>11</sup> 12	12 <sup>11</sup> 46	25 <sup>11</sup> 28	4 <sup>11</sup> 35	8 <sup>11</sup> 32	1 <sup>11</sup> 52	20 <sup>11</sup> 33	1 <sup>11</sup> 40	16 <sup>11</sup> 38	16 <sup>11</sup> 25	15 <sup>11</sup> 20	14 <sup>11</sup> 18	5 <sup>11</sup> 4	T 12
F 13	6 0 57	0 <sup>11</sup> 3 7'59	2 <sup>11</sup> Δ 6	12 <sup>11</sup> 11	26 <sup>11</sup> 43	4 <sup>11</sup> 46	8 <sup>11</sup> 46	1 <sup>11</sup> 54	20 <sup>11</sup> 31	1 <sup>11</sup> 40	16 <sup>11</sup> 37	16 <sup>11</sup> 11	15 <sup>11</sup> 16	14 <sup>11</sup> 24	5 <sup>11</sup> 4	F 13
S 14	6 4 53	1 <sup>11</sup> 9'09	14 <sup>11</sup> 5	11 <sup>11</sup> 24	27 <sup>11</sup> 57	4 <sup>11</sup> 57	8 <sup>11</sup> 59	1 <sup>11</sup> 56	20 <sup>11</sup> 30	1 <sup>11</sup> 39	16 <sup>11</sup> 36	15 <sup>11</sup> 57	15 <sup>11</sup> 13	14 <sup>11</sup> 31	5 <sup>11</sup> 4	S 14
S 15	6 8 50	2 <sup>11</sup> 10'19	26 <sup>11</sup> 10	10 <sup>11</sup> 27	29 <sup>11</sup> 12	5 <sup>11</sup> 9	9 <sup>11</sup> 12	1 <sup>11</sup> 58	20 <sup>11</sup> 28	1 <sup>11</sup> 39	16 <sup>11</sup> 34	15 <sup>11</sup> 43	15 <sup>11</sup> 10	14 <sup>11</sup> 38	5 <sup>11</sup> 5	S 15
M 16	6 12 46	3 <sup>11</sup> 11'29	8 <sup>11</sup> Δ21	9 <sup>11</sup> 21	0 <sup>11</sup> Δ26	5 <sup>11</sup> 22	9 <sup>11</sup> 25	2 <sup>11</sup> 0	20 <sup>11</sup> 26	1 <sup>11</sup> 38	16 <sup>11</sup> 33	15 <sup>11</sup> 31	15 <sup>11</sup> 7	14 <sup>11</sup> 44	5 <sup>11</sup> 5	M 16
T 17	6 16 43	4 <sup>11</sup> 12'40	20 <sup>11</sup> 40	8 <sup>11</sup> 7	1 <sup>11</sup> 41	5 <sup>11</sup> 35	9 <sup>11</sup> 38	2 <sup>11</sup> 3	20 <sup>11</sup> 25	1 <sup>11</sup> 37	16 <sup>11</sup> 32	15 <sup>11</sup> 21	15 <sup>11</sup> 4	14 <sup>11</sup> 51	5 <sup>11</sup> 6	T 17
W 18	6 20 39	5 <sup>11</sup> 13'50	3 <sup>11</sup> M10	6 <sup>11</sup> 49	2 <sup>11</sup> 55	5 <sup>11</sup> 49	9 <sup>11</sup> 50	2 <sup>11</sup> 5	20 <sup>11</sup> 23	1 <sup>11</sup> 36	16 <sup>11</sup> 31	15 <sup>11</sup> 15	15 <sup>11</sup> 1	14 <sup>11</sup> 58	5 <sup>11</sup> 6	W 18
T 19	6 24 36	6 <sup>11</sup> 15'01	15 <sup>11</sup> 54	5 <sup>11</sup> 28	4 <sup>11</sup> 9	6 <sup>11</sup> 3	10 <sup>11</sup> 3	2 <sup>11</sup> 7	20 <sup>11</sup> 22	1 <sup>11</sup> 36	16 <sup>11</sup> 29	15 <sup>11</sup> 11	14 <sup>11</sup> 57	15 <sup>11</sup> 5	5 <sup>11</sup> 7	T 19
F 20	6 28 33	7 <sup>11</sup> 16'12	28 <sup>11</sup> 53	4 <sup>11</sup> 7	5 <sup>11</sup> 24	6 <sup>11</sup> 18	10 <sup>11</sup> 16	2 <sup>11</sup> 10	20 <sup>11</sup> 20	1 <sup>11</sup> 35	16 <sup>11</sup> 28	15 <sup>11</sup> 10	14 <sup>11</sup> 54	15 <sup>11</sup> 11	5 <sup>11</sup> 8	F 20
S 21	6 32 29	8 <sup>11</sup> 17'23	12 <sup>11</sup> Δ13	2 <sup>11</sup> 50	6 <sup>11</sup> 38	6 <sup>11</sup> 33	10 <sup>11</sup> 29	2 <sup>11</sup> 13	20 <sup>11</sup> 19	1 <sup>11</sup> 34	16 <sup>11</sup> 27	15 <sup>11</sup> 9	14 <sup>11</sup> 51	15 <sup>11</sup> 18	5 <sup>11</sup> 8	S 21
S 22	6 36 26	9 <sup>11</sup> 18'34	25 <sup>11</sup> 55	1 <sup>11</sup> 37	7 <sup>11</sup> 52	6 <sup>11</sup> 49	10 <sup>11</sup> 42	2 <sup>11</sup> 15	20 <sup>11</sup> 17	1 <sup>11</sup> 33	16 <sup>11</sup> 26	15 <sup>11</sup> 9	14 <sup>11</sup> 48	15 <sup>11</sup> 25	5 <sup>11</sup> 9	S 22
M 23	6 40 22	10 <sup>11</sup> 19'45	10 <sup>11</sup> M 2	0 <sup>11</sup> 31	9 <sup>11</sup> 7	7 <sup>11</sup> 5	10 <sup>11</sup> 54	2 <sup>11</sup> 18	20 <sup>11</sup> 16	1 <sup>11</sup> 32	16 <sup>11</sup> 24	15 <sup>11</sup> 8	14 <sup>11</sup> 45	15 <sup>11</sup> 31	5 <sup>11</sup> 10	M 23
T 24	6 44 19	11 <sup>11</sup> 20'56	24 <sup>11</sup> 33	29 <sup>11</sup> Δ34	10 <sup>11</sup> 21	7 <sup>11</sup> 22	11 <sup>11</sup> 7	2 <sup>11</sup> 21	20 <sup>11</sup> 14	1 <sup>11</sup> 31	16 <sup>11</sup> 23	15 <sup>11</sup> 4	14 <sup>11</sup> 42	15 <sup>11</sup> 38	5 <sup>11</sup> 11	T 24
W 25	6 48 15	12 <sup>11</sup> 22'08	9 <sup>11</sup> Δ26	28 <sup>11</sup> 46	11 <sup>11</sup> 35	7 <sup>11</sup> 40	11 <sup>11</sup> 20	2 <sup>11</sup> 24	20 <sup>11</sup> 13	1 <sup>11</sup> 30	16 <sup>11</sup> 22	14 <sup>11</sup> 57	14 <sup>11</sup> 38	15 <sup>11</sup> 45	5 <sup>11</sup> 12	W 25
T 26	6 52 12	13 <sup>11</sup> 23'19	24 <sup>11</sup> 33	28 <sup>11</sup> 7	12 <sup>11</sup> 50	7 <sup>11</sup> 57	11 <sup>11</sup> 32	2 <sup>11</sup> 27	20 <sup>11</sup> 12	1 <sup>11</sup> 29	16 <sup>11</sup> 20	14 <sup>11</sup> 47	14 <sup>11</sup> 35	15 <sup>11</sup> 51	5 <sup>11</sup> 13	T 26
F 27	6 56 8	14 <sup>11</sup> 24'30	9 <sup>11</sup> Δ45	27 <sup>11</sup> 39	14 <sup>11</sup> 4	8 <sup>11</sup> 16	11 <sup>11</sup> 45	2 <sup>11</sup> 31	20 <sup>11</sup> 11	1 <sup>11</sup> 28	16 <sup>11</sup> 19	14 <sup>11</sup> 36	14 <sup>11</sup> 32	15 <sup>11</sup> 58	5 <sup>11</sup> 14	F 27
S 28	7 0 5	15 <sup>11</sup> 25'40	24 <sup>11</sup> 52	27 <sup>11</sup> 20	15 <sup>11</sup> 18	8 <sup>11</sup> 34	11 <sup>11</sup> 57	2 <sup>11</sup> 34	20 <sup>11</sup> 10	1 <sup>11</sup> 27	16 <sup>11</sup> 18	14 <sup>11</sup> 23	14 <sup>11</sup> 29	16 <sup>11</sup> 5	5 <sup>11</sup> 15	S 28
S 29	7 4 2	16 <sup>11</sup> 26'50	9 <sup>11</sup> Δ43	27 <sup>11</sup> 10	16 <sup>11</sup> 32	8 <sup>11</sup> 53	12 <sup>11</sup> 9	2 <sup>11</sup> 38	20 <sup>11</sup> 8	1 <sup>11</sup> 26	16 <sup>11</sup> 16	14 <sup>11</sup> 12	14 <sup>11</sup> 26	16 <sup>11</sup> 12	5 <sup>11</sup> 16	S 29
M 30	7 7 58	17 <sup>11</sup> 27'59	24 <sup>11</sup> 9	27 <sup>11</sup> D10	17 <sup>11</sup> 46	9 <sup>11</sup> 13	12 <sup>11</sup> 22	2 <sup>11</sup> 41	20 <sup>11</sup> 7	1 <sup>11</sup> 25	16 <sup>11</sup> 15	14 <sup>11</sup> 3	14 <sup>11</sup> 22	16 <sup>11</sup> 18	5 <sup>11</sup> 18	M 30
T 31	7 11 55	18 <sup>11</sup> 29'08	8 <sup>11</sup> Δ 6	27 <sup>11</sup> Δ17	19 <sup>11</sup> Δ 0	9 <sup>11</sup> Δ33	12 <sup>11</sup> Δ34	2 <sup>11</sup> Y45	20 <sup>11</sup> Δ 6	1 <sup>11</sup> M44	16 <sup>11</sup> Δ14	13 <sup>11</sup> Δ56	14 <sup>11</sup> Δ19	16 <sup>11</sup> II25	5 <sup>11</sup> Y19	T 31