



# Astrodienst Ephemeris Tables for the year 1597

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 1597  
geocentric

JANUARY 1597 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	6 42 16	10°34'32	11°12'27	17°47'49	24°14'49	19°27'26	08°50	21°R11	15°Y 5	20°R58	18°R18	29°R 9	29°H29	5°H20	27°R21	W 1
T 2	6 46 13	11°44'41	23°24	18°56	25°56	20°10	0°51	21°H11	15° 6	20°L57	18°D18	28°H55	29°25	5°27	27°H17	T 2
F 3	6 50 9	12°45'49	5°27	20° 5	27° 3	20°55	0°53	21°11	15° 6	20°56	18°Y18	28°41	29°22	5°34	27°13	F 3
S 4	6 54 6	13°46'58	17°38	21°16	28°10	21°39	0°55	21°10	15° 7	20°54	18°18	28°27	29°19	5°40	27°10	S 4
S 5	6 58 3	14°48'06	29°57	22°29	29°18	22°23	0°57	21°10	15° 8	20°53	18°18	28°14	29°16	5°47	27° 6	S 5
M 6	7 1 59	15°49'14	12°24	23°43	0°25	23° 7	0°59	21° 9	15° 8	20°52	18°18	28° 4	29°13	5°54	27° 2	M 6
T 7	7 5 56	16°50'21	25° 2	25° 0	1°33	23°52	1° 1	21° 8	15° 9	20°51	18°18	27°57	29° 9	6° 1	26°58	T 7
W 8	7 9 52	17°51'29	7°50	26°18	2°41	24°36	1° 4	21° 8	15°10	20°49	18°18	27°52	29° 6	6° 7	26°55	W 8
T 9	7 13 49	18°52'36	20°51	27°37	3°49	25°20	1° 7	21° 7	15°10	20°48	18°18	27°51	29° 3	6°14	26°51	T 9
F 10	7 17 45	19°53'42	4° 6	28°57	4°58	26° 5	1°10	21° 6	15°11	20°46	18°19	27°D50	29° 0	6°21	26°47	F 10
S 11	7 21 42	20°54'49	17°38	0°318	6° 6	26°49	1°13	21° 5	15°12	20°45	18°19	27°R51	28°57	6°27	26°44	S 11
S 12	7 25 38	21°55'55	1°129	1°41	7°15	27°34	1°16	21° 3	15°13	20°44	18°19	27°51	28°54	6°34	26°40	S 12
M13	7 29 35	22°57'01	15°39	3° 4	8°24	28°18	1°20	21° 2	15°14	20°42	18°19	27°48	28°50	6°41	26°37	M13
T 14	7 33 32	23°58'07	0°28	4°29	9°33	29° 3	1°24	21° 1	15°15	20°41	18°20	27°44	28°47	6°48	26°33	T 14
W15	7 37 28	24°59'13	14°51	5°54	10°42	29°48	1°28	20°59	15°16	20°39	18°20	27°37	28°44	6°54	26°30	W15
T 16	7 41 25	26° 0'18	29°44	7°20	11°51	0°32	1°32	20°57	15°18	20°38	18°20	27°28	28°41	7° 1	26°26	T 16
F 17	7 45 21	27° 1'22	14°37	8°47	13° 1	1°17	1°36	20°56	15°19	20°36	18°20	27°18	28°38	7° 8	26°23	F 17
S 18	7 49 18	28° 2'26	29°22	10°15	14°10	2° 2	1°41	20°54	15°20	20°35	18°21	27° 8	28°35	7°14	26°20	S 18
S 19	7 53 14	29° 3'29	13°50	11°43	15°20	2°47	1°45	20°52	15°21	20°33	18°21	27° 0	28°31	7°21	26°17	S 19
M20	7 57 11	0° 4'31	27°56	13°13	16°30	3°32	1°50	20°50	15°23	20°32	18°22	26°54	28°28	7°28	26°14	M20
T 21	8 1 7	1° 5'31	11°35	14°42	17°40	4°16	1°55	20°48	15°24	20°30	18°22	26°50	28°25	7°35	26°11	T 21
W22	8 5 4	2° 6'31	24°47	16°13	18°50	5° 1	2° 1	20°45	15°26	20°29	18°22	26°D49	28°22	7°41	26° 8	W22
T 23	8 9 1	3° 7'29	7°35	17°44	20° 0	5°46	2° 6	20°43	15°27	20°27	18°23	26°49	28°19	7°48	26° 5	T 23
F 24	8 12 57	4° 8'27	20° 1	19°16	21°10	6°31	2°12	20°41	15°29	20°25	18°23	26°51	28°15	7°55	26° 2	F 24
S 25	8 16 54	5° 9'23	2°11	20°49	22°20	7°16	2°18	20°38	15°30	20°24	18°24	26°R51	28°12	8° 1	25°59	S 25
S 26	8 20 50	6°10'17	14° 9	22°22	23°31	8° 1	2°24	20°35	15°32	20°22	18°24	26°51	28° 9	8° 8	25°56	S 26
M27	8 24 47	7°11'11	26° 1	23°56	24°41	8°46	2°30	20°33	15°33	20°21	18°25	26°49	28° 6	8°15	25°53	M27
T 28	8 28 43	8°12'03	7°11	25°31	25°52	9°31	2°36	20°30	15°35	20°19	18°26	26°44	28° 3	8°22	25°51	T 28
W29	8 32 40	9°12'53	19°45	27° 7	27° 2	10°17	2°42	20°27	15°37	20°17	18°26	26°38	28° 0	8°28	25°48	W29
T 30	8 36 36	10°13'43	1°45	28°43	28°13	11° 2	2°49	20°24	15°39	20°16	18°27	26°30	27°56	8°35	25°46	T 30
F 31	8 40 33	11°14'31	13°55	0°20	29°24	11°347	2°56	20°21	15°41	20°14	18°27	26°H21	27°H53	8°H42	25°H43	F 31

Delta T = 92.91 sec

Greg. Calendar

FEBRUARY 1597 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	8 44 30	12°15'17	26°16	1°58	0°35	12°32	3° 3	20°R18	15°Y43	20°R12	18°Y28	26°R13	27°H50	8°H48	25°R41	S 1
S 2	8 48 26	13°16'02	8°49	3°36	1°46	13°18	3°10	20°H15	15°45	20°L11	18°29	26°H 5	27°47	8°55	25°H39	S 2
M 3	8 52 23	14°16'46	21°34	5°15	2°57	14° 3	3°17	20°11	15°47	20° 9	18°29	25°59	27°44	9° 2	25°37	M 3
T 4	8 56 19	15°17'29	4°32	6°55	4° 8	14°48	3°25	20° 8	15°49	20° 7	18°30	25°54	27°41	9° 9	25°35	T 4
W 5	9 0 16	16°18'10	17°42	8°36	5°19	15°33	3°32	20° 4	15°51	20° 6	18°31	25°52	27°37	9°15	25°33	W 5
T 6	9 4 12	17°18'50	1° 3	10°18	6°30	16°19	3°40	20° 1	15°53	20° 4	18°32	25°D52	27°34	9°22	25°31	T 6
F 7	9 8 9	18°19'28	14°35	12° 1	7°42	17° 4	3°48	19°57	15°55	20° 2	18°32	25°53	27°31	9°29	25°29	F 7
S 8	9 12 5	19°20'06	28°18	13°44	8°53	17°50	3°56	19°53	15°57	20° 1	18°33	25°55	27°28	9°35	25°27	S 8
S 9	9 16 2	20°20'42	12°12	15°28	10° 5	18°35	4° 4	19°50	15°59	19°59	18°34	25°56	27°25	9°42	25°25	S 9
M10	9 19 59	21°21'18	26°17	17°14	11°16	19°21	4°12	19°46	16° 2	19°57	18°35	25°R56	27°21	9°49	25°24	M10
T 11	9 23 55	22°21'52	10°31	19° 0	12°28	20° 6	4°21	19°42	16° 4	19°56	18°36	25°55	27°18	9°56	25°22	T 11
W12	9 27 52	23°22'25	24°53	20°47	13°40	20°52	4°29	19°38	16° 6	19°54	18°37	25°52	27°15	10° 2	25°21	W12
T 13	9 31 48	24°22'57	9°318	22°35	14°51	21°38	4°38	19°34	16° 9	19°52	18°37	25°48	27°12	10° 9	25°19	T 13
F 14	9 35 45	25°23'27	23°42	24°23	16° 3	22°23	4°47	19°30	16°11	19°51	18°38	25°43	27° 9	10°16	25°18	F 14
S 15	9 39 41	26°23'56	7°59	26°13	17°15	23° 9	4°56	19°26	16°14	19°49	18°39	25°39	27° 6	10°22	25°17	S 15
S 16	9 43 38	27°24'23	22° 5	28° 3	18°27	23°55	5° 5	19°22	16°16	19°47	18°40	25°35	27° 2	10°29	25°16	S 16
M17	9 47 34	28°24'49	5°H53	29°55	19°39	24°40	5°14	19°17	16°19	19°46	18°41	25°32	26°59	10°36	25°15	M17
T 18	9 51 31	29°25'12	19°22	1°47	20°51	25°26	5°24	19°13	16°21	19°44	18°42	25°D31	26°56	10°43	25°14	T 18
W19	9 55 28	0°H25'34	2°Y30	3°40	22° 3	26°12	5°33	19° 9	16°24	19°42	18°43	25°31	26°53	10°49	25°13	W19
T 20	9 59 24	1°25'54	15°18	5°33	23°15	26°58	5°43	19° 4	16°26	19°41	18°44	25°32	26°50	10°56	25°12	T 20
F 21	10 3 21	2°26'13	27°46	7°27	24°27	27°43	5°52	19° 0	16°29	19°39	18°45	25°33	26°47	11° 3	25°11	F 21
S 22	10 7 17	3°26'29	9°H59	9°21	25°39	28°29	6° 2	18°55	16°32	19°37	18°46	25°35	26°43	11° 9	25°11	S 22
S 23	10 11 14	4°26'43	22° 0	11°16	26°52	29°15	6°12	18°51	16°34	19°36	18°47	25°36	26°40	11°16	25°10	S 23
M24	10 15 10	5°26'55	3°H54	13°11	28° 4	0° 1	6°22	18°46	16°37	19°34	18°48	25°R37	26°37	11°23	25°10	M24
T 25	10 19 7	6°27'05	15°46	15° 6	29°16	0°47	6°33	18°42	16°40	19°33	18°49	25°37	26°34	11°30	25° 9	T 25
W26	10 23 3	7°27'13	27°41	17° 0	0°28	1°33	6°43	18°37	16°43	19°31	18°50	25°35	26°31	11°36	25° 9	W26
T 27	10 27 0	8°27'19	9°H43	18°55	1°41	2°19	6°53	18°33	16°46	19°29	18°51	25°33	26°27	11°43	25° 9	T 27
F 28	10 30 57	9°H27'23	21°H56	20°H48	2°53	3° 5	7° 4	18°H28	16°Y49	19°H28	18°Y53	25°H31	26°H24	11°H50	25°D 9	F 28

Delta T = 92.79 sec

Greg. Calendar

# ASTRODIENST EPHEMERIS for the year 1597

## geocentric

MARCH 1597 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	10 34 53	10 <sup>h</sup> 27'25"	4 <sup>h</sup> 23'	22 <sup>h</sup> 40'	4 <sup>h</sup> 55'	3 <sup>h</sup> 55'	7 <sup>h</sup> 14'	18 <sup>h</sup> 23'	16 <sup>h</sup> 52'	19 <sup>h</sup> 26'	18 <sup>h</sup> 54'	25 <sup>h</sup> 29'	26 <sup>h</sup> 21'	11 <sup>h</sup> 57'	25 <sup>h</sup> 11'	S 1
S 2	10 38 50	11 <sup>h</sup> 27'24"	17° 7'	24°30'	5°18'	4°37'	7°25'	18 <sup>h</sup> 19'	16°54'	19 <sup>h</sup> 25'	18°55'	25 <sup>h</sup> 27'	26°18'	12° 3'	25° 9'	S 2
M 3	10 42 46	12 <sup>h</sup> 27'22"	0 <sup>h</sup> 18'	26°19'	6°30'	5°23'	7°36'	18°14'	16°57'	19°23'	18°56'	25°25'	26°15'	12°10'	25° 9'	M 3
T 4	10 46 43	13 <sup>h</sup> 27'17"	13°26'	28° 5'	7°43'	6° 9'	7°47'	18° 9'	17° 0'	19°22'	18°57'	25°24'	26°12'	12°17'	25°10'	T 4
W 5	10 50 39	14 <sup>h</sup> 27'11"	27° 0'	29°48'	8°55'	6°55'	7°58'	18° 4'	17° 3'	19°20'	18°58'	25°24'	26° 8'	12°23'	25°10'	W 5
T 6	10 54 36	15 <sup>h</sup> 27'02"	10 <sup>h</sup> 48'	1 <sup>h</sup> 27'	10° 8'	7°41'	8° 9'	18° 0'	17° 6'	19°19'	19° 0'	25°24'	26° 5'	12°30'	25°10'	T 6
F 7	10 58 32	16 <sup>h</sup> 26'52"	24°47'	3° 3'	11°20'	8°27'	8°20'	17°55'	17° 9'	19°17'	19° 1'	25°25'	26° 2'	12°37'	25°11'	F 7
S 8	11 2 29	17 <sup>h</sup> 26'40"	8 <sup>h</sup> 53'	4°35'	12°33'	9°13'	8°32'	17°50'	17°13'	19°16'	19° 2'	25°26'	25°59'	12°44'	25°12'	S 8
S 9	11 6 26	18 <sup>h</sup> 26'27"	23° 5'	6° 1'	13°45'	9°59'	8°43'	17°45'	17°16'	19°14'	19° 3'	25°26'	25°56'	12°50'	25°12'	S 9
M10	11 10 22	19 <sup>h</sup> 26'12"	7 <sup>h</sup> 19'	7°22'	14°58'	10°45'	8°55'	17°41'	17°19'	19°13'	19° 4'	25°27'	25°52'	12°57'	25°13'	M10
T 11	11 14 19	20 <sup>h</sup> 25'55"	21°32'	8°37'	16°11'	11°31'	9° 6'	17°36'	17°22'	19°12'	19° 6'	25°R27'	25°49'	13° 4'	25°14'	T 11
W12	11 18 15	21 <sup>h</sup> 25'36"	5 <sup>h</sup> 43'	9°46'	17°24'	12°17'	9°18'	17°31'	17°25'	19°10'	19° 7'	25°27'	25°46'	13°10'	25°15'	W12
T 13	11 22 12	22 <sup>h</sup> 25'16"	19°47'	10°48'	18°36'	13° 4'	9°30'	17°26'	17°28'	19° 9'	19° 8'	25°26'	25°43'	13°17'	25°16'	T 13
F 14	11 26 8	23 <sup>h</sup> 24'54"	3 <sup>h</sup> 45'	11°43'	19°49'	13°50'	9°41'	17°22'	17°31'	19° 7'	19°10'	25°26'	25°40'	13°24'	25°17'	F 14
S 15	11 30 5	24 <sup>h</sup> 24'30"	17°33'	12°31'	21° 2'	14°36'	9°53'	17°17'	17°35'	19° 6'	19°11'	25°26'	25°37'	13°31'	25°19'	S 15
S 16	11 34 1	25°24'04"	1 <sup>h</sup> 10'	13°11'	22°15'	15°22'	10° 5'	17°12'	17°38'	19° 5'	19°12'	25°D26'	25°33'	13°37'	25°20'	S 16
M17	11 37 58	26°23'36"	14°33'	13°44'	23°27'	16° 8'	10°17'	17° 8'	17°41'	19° 4'	19°13'	25°26'	25°30'	13°44'	25°21'	M17
T 18	11 41 55	27°23'07"	27°42'	14° 9'	24°40'	16°55'	10°30'	17° 3'	17°44'	19° 2'	19°15'	25°R26'	25°27'	13°51'	25°23'	T 18
W19	11 45 51	28°22'35"	10 <sup>h</sup> 35'	14°26'	25°53'	17°41'	10°42'	16°58'	17°48'	19° 1'	19°16'	25°26'	25°24'	13°57'	25°24'	W19
T 20	11 49 48	29°22'01"	23°13'	14°35'	27° 6'	18°27'	10°54'	16°54'	17°51'	19° 0'	19°17'	25°26'	25°21'	14° 4'	25°26'	T 20
F 21	11 53 44	0 <sup>h</sup> 21'25"	5 <sup>h</sup> 37'	14°R36'	28°19'	19°13'	11° 7'	16°49'	17°54'	18°59'	19°19'	25°25'	25°18'	14°11'	25°28'	F 21
S 22	11 57 41	1°20'46"	17°48'	14°30'	29°32'	20° 0'	11°19'	16°45'	17°58'	18°58'	19°20'	25°24'	25°14'	14°18'	25°30'	S 22
S 23	12 1 37	2°20'06"	29°49'	14°17'	0 <sup>h</sup> 44'	20°46'	11°32'	16°40'	18° 1'	18°56'	19°21'	25°23'	25°11'	14°24'	25°32'	S 23
M24	12 5 34	3°19'23"	11 <sup>h</sup> 44'	13°57'	1°57'	21°32'	11°44'	16°36'	18° 4'	18°55'	19°23'	25°23'	25° 8'	14°31'	25°34'	M24
T 25	12 9 30	4°18'38"	23°37'	13°30'	3°10'	22°18'	11°57'	16°31'	18° 8'	18°54'	19°24'	25°22'	25° 5'	14°38'	25°36'	T 25
W26	12 13 27	5°17'51"	5 <sup>h</sup> 31'	12°59'	4°23'	23° 5'	12° 9'	16°27'	18°11'	18°53'	19°25'	25°D22'	25° 2'	14°45'	25°38'	W26
T 27	12 17 24	6°17'01"	17°33'	12°22'	5°36'	23°51'	12°22'	16°23'	18°14'	18°52'	19°27'	25°22'	24°58'	14°51'	25°40'	T 27
F 28	12 21 20	7°16'09"	29°45'	11°41'	6°49'	24°37'	12°35'	16°18'	18°18'	18°51'	19°28'	25°23'	24°55'	14°58'	25°43'	F 28
S 29	12 25 17	8°15'15"	12 <sup>h</sup> 13'	10°57'	8° 2'	25°23'	12°48'	16°14'	18°21'	18°50'	19°30'	25°24'	24°52'	15° 5'	25°45'	S 29
S 30	12 29 13	9°14'18"	25° 0'	10°11'	9°15'	26°10'	13° 1'	16°10'	18°25'	18°49'	19°31'	25°25'	24°49'	15°11'	25°48'	S 30
M31	12 33 10	10 <sup>h</sup> 13'19"	8 <sup>h</sup> 19'	9 <sup>h</sup> 23'	10 <sup>h</sup> 28'	26°56'	13 <sup>h</sup> 14'	16 <sup>h</sup> 19'	18 <sup>h</sup> 28'	18 <sup>h</sup> 48'	19 <sup>h</sup> 32'	25 <sup>h</sup> 26'	24 <sup>h</sup> 46'	15 <sup>h</sup> 11'	25 <sup>h</sup> 50'	M31

Delta T = 92.68 sec

Greg. Calendar

APRIL 1597 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	12 37 6	11 <sup>h</sup> 12'18"	21 <sup>h</sup> 40'	8°R36'	11 <sup>h</sup> 41'	27°42'	13 <sup>h</sup> 27'	16°R 2'	18 <sup>h</sup> 31'	18°R47'	19 <sup>h</sup> 34'	25°R27'	24 <sup>h</sup> 43'	15 <sup>h</sup> 25'	25 <sup>h</sup> 53'	T 1
W 2	12 41 3	12°11'14"	5 <sup>h</sup> 34'	7 <sup>h</sup> 48'	12°54'	28°28'	13°40'	15 <sup>h</sup> 58'	18°35'	18 <sup>h</sup> 46'	19°35'	25 <sup>h</sup> 26'	24°39'	15°32'	25°56'	W 2
T 3	12 44 59	13°10'09"	19°46'	7° 2'	14° 7'	29°15'	13°53'	15°54'	18°38'	18°46'	19°37'	25°25'	24°36'	15°38'	25°58'	T 3
F 4	12 48 56	14° 9'02"	4 <sup>h</sup> 14'	6°19'	15°20'	0 <sup>h</sup> 1'	14° 6'	15°50'	18°42'	18°45'	19°38'	25°24'	24°33'	15°45'	26° 1'	F 4
S 5	12 52 52	15° 7'52"	18°50'	5°38'	16°33'	0°47'	14°20'	15°46'	18°45'	18°44'	19°39'	25°21'	24°30'	15°52'	26° 4'	S 5
S 6	12 56 49	16° 6'41"	3 <sup>h</sup> 28'	5° 1'	17°46'	1°33'	14°33'	15°42'	18°49'	18°43'	19°41'	25°18'	24°27'	15°58'	26° 7'	S 6
M 7	13 0 46	17° 5'29"	18° 2'	4°27'	18°59'	2°20'	14°46'	15°38'	18°52'	18°43'	19°42'	25°16'	24°24'	16° 5'	26°10'	M 7
T 8	13 4 42	18° 4'14"	2 <sup>h</sup> 32'	3°59'	20°12'	3° 6'	15° 0'	15°35'	18°56'	18°42'	19°44'	25°14'	24°20'	16°12'	26°14'	T 8
W 9	13 8 39	19° 2'58"	16°39'	3°35'	21°25'	3°52'	15°13'	15°31'	18°59'	18°41'	19°45'	25°D13'	24°17'	16°19'	26°17'	W 9
T 10	13 12 35	20° 1'40"	0 <sup>h</sup> 36'	3°16'	22°38'	4°38'	15°27'	15°28'	19° 2'	18°41'	19°46'	25°14'	24°14'	16°25'	26°20'	T 10
F 11	13 16 32	21° 0'21"	14°18'	3° 2'	23°51'	5°25'	15°40'	15°24'	19° 6'	18°40'	19°48'	25°15'	24°11'	16°32'	26°24'	F 11
S 12	13 20 28	21°58'59"	27°44'	2°54'	25° 4'	6°11'	15°54'	15°21'	19° 9'	18°39'	19°49'	25°16'	24° 8'	16°39'	26°27'	S 12
S 13	13 24 25	22°57'36"	10 <sup>h</sup> 57'	2°D50'	26°17'	6°57'	16° 7'	15°18'	19°13'	18°39'	19°51'	25°18'	24° 4'	16°46'	26°31'	S 13
M14	13 28 21	23°56'11"	23°55'	2°52'	27°30'	7°43'	16°21'	15°14'	19°16'	18°38'	19°52'	25°R18'	24° 1'	16°52'	26°34'	M14
T 15	13 32 18	24°54'45"	6 <sup>h</sup> 42'	2°59'	28°44'	8°29'	16°34'	15°11'	19°20'	18°38'	19°53'	25°18'	23°58'	16°59'	26°38'	T 15
W16	13 36 15	25°53'16"	19°17'	3°10'	29°57'	9°16'	16°48'	15° 8'	19°23'	18°37'	19°55'	25°16'	23°55'	17° 6'	26°42'	W16
T 17	13 40 11	26°51'46"	1 <sup>h</sup> 41'	3°27'	1 <sup>h</sup> 10'	10° 2'	17° 2'	15° 5'	19°26'	18°37'	19°56'	25°12'	23°52'	17°12'	26°45'	T 17
F 18	13 44 8	27°50'14"	13°55'	3°48'	2°23'	10°48'	17°16'	15° 2'	19°30'	18°37'	19°58'	25° 7'	23°49'	17°19'	26°49'	F 18
S 19	13 48 4	28°48'39"	26° 0'	4°13'	3°36'	11°34'	17°29'	15° 0'	19°33'	18°36'	19°59'	25° 1'	23°45'	17°26'	26°53'	S 19
S 20	13 52 1	29°47'03"	7 <sup>h</sup> 59'	4°43'	4°49'	12°20'	17°43'	14°57'	19°37'	18°36'	20° 0'	24°55'	23°42'	17°33'	26°57'	S 20
M21	13 55 57	0 <sup>h</sup> 45'25"	19°52'	5°17'	6° 2'	13° 6'	17°57'	14°54'	19°40'	18°36'	20° 2'	24°49'	23°39'	17°39'	27° 1'	M21
T 22	13 59 54	1°43'45"	1 <sup>h</sup> 34'	5°55'	7°15'	13°52'	18°11'	14°52'	19°43'	18°35'	20° 3'	24°44'	23°36'	17°46'	27° 5'	T 22
W23	14 3 50	2°42'03"	13°37'	6°37'	8°29'	14°38'	18°25'	14°49'	19°47'	18°35'	20° 5'	24°41'	23°33'	17°53'	27°10'	W23
T 24	14 7 47	3°40'19"	25°37'	7°22'	9°42'	15°24'	18°39'	14°47'	19°50'	18°35'	20° 6'	24°39'	23°30'	17°59'	27°14'	T 24
F 25	14 11 44	4°38'33"	7 <sup>h</sup> 46'	8°11'	10°55'	16°10'	18°53'	14°45'	19°54'	18°35'	20° 7'	24°D38'	23°26'	18° 6'	27°18'	F 25
S 26	14 15 40	5°36'45"	20°11'	9° 3'	12° 8'	16°56'	19° 7'	14°43'	19°57'	18°35'	20° 9'	24°39'	23°23'	18°13'	27°23'	S 26
S 27	14 19 37	6°34'54"	2 <sup>h</sup> 56'	9°58'	13°21'	17°42'	19°21'	14°41'	20° 0'	18°35'	20°10'	24°41'	23°20'	18°20'	27°27'	S 27
M28	14 23 33	7°33'02"	16° 4'	10°57'	14°34'	18°28'	19°35'	14°39'	20° 4'	18°34'	20°11'	24°42'	23°17'	18°26'	27°31'	M28
T 29	14 27 30	8°31'07"	29°39'	11°58'	15°47'	19°14'	19°49'	14°37'	20° 7'	18°D34'	20°13'	24°R42'	23°14'	18°33'	27°36'	T 29
W30	14 31 26	9 <sup>h</sup> 29'11"	13 <sup>h</sup> 41'	13 <sup>h</sup> 2'	17 <sup>h</sup> 0'	20 <sup>h</sup> 1'	20 <sup>h</sup> 3'	14 <sup>h</sup> 35'	20 <sup>h</sup> 10'	18 <sup>h</sup> 23'	20 <sup>h</sup> 14'	24 <sup>h</sup> 41'	23 <sup>h</sup> 10'	18 <sup>h</sup> 40'	27 <sup>h</sup> 41'	W30

Delta T = 92.57 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1597  
geocentric

MAY 1597 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 35 23	10♈27'13	28♌ 8	14♍ 9	18♍14	20♈46	20♈17	14°R34	20♍14	18♌234	20♍15	24°R37	23♈ 7	18♌47	27♌45	T 1
F 2	14 39 19	11°25'13	12♌55	15°18	19°27	21°31	20°31	14♍32	20°17	18°35	20°17	24♈32	23° 4	18°53	27°50	F 2
S 3	14 43 16	12°23'12	27°56	16°31	20°40	22°17	20°45	14°31	20°20	18°35	20°18	24°25	23° 1	19° 0	27°55	S 3
S 4	14 47 13	13°21'09	12♌59	17°45	21°53	23° 3	20°59	14°29	20°23	18°35	20°19	24°18	22°58	19° 7	27°59	S 4
M 5	14 51 9	14°19'05	27°57	19° 2	23° 6	23°49	21°13	14°28	20°27	18°35	20°21	24°11	22°55	19°13	28° 4	M 5
T 6	14 55 6	15°17'00	12♌40	20°22	24°19	24°35	21°27	14°27	20°30	18°35	20°22	24° 5	22°51	19°20	28° 9	T 6
W 7	14 59 2	16°14'53	27° 4	21°44	25°33	25°20	21°41	14°26	20°33	18°35	20°23	24° 2	22°48	19°27	28°14	W 7
T 8	15 2 59	17°12'45	11♌ 5	23° 8	26°46	26° 6	21°55	14°25	20°36	18°36	20°25	24° 0	22°45	19°34	28°19	T 8
F 9	15 6 55	18°10'36	24°43	24°35	27°59	26°51	22° 9	14°24	20°39	18°36	20°26	24°D 0	22°42	19°40	28°24	F 9
S 10	15 10 52	19° 8'25	7♈59	26° 3	29°12	27°37	22°23	14°23	20°42	18°36	20°27	24° 1	22°39	19°47	28°29	S 10
S 11	15 14 48	20° 6'14	20°57	27°34	0♈25	28°23	22°38	14°22	20°45	18°37	20°28	24°R 2	22°35	19°54	28°34	S 11
M12	15 18 45	21° 4'01	3♍39	29° 8	1°39	29° 8	22°52	14°22	20°49	18°37	20°30	24° 1	22°32	20° 0	28°40	M12
T 13	15 22 42	22° 1'47	16° 8	0♈43	2°52	29°54	23° 6	14°21	20°52	18°37	20°31	23°59	22°29	20° 7	28°45	T 13
W14	15 26 38	22°59'31	28°27	2°21	4° 5	0♍39	23°20	14°21	20°55	18°38	20°32	23°54	22°26	20°14	28°50	W14
T 15	15 30 35	23°57'15	10♈37	4° 0	5°18	1°25	23°34	14°21	20°58	18°38	20°33	23°47	22°23	20°21	28°55	T 15
F 16	15 34 31	24°54'57	22°41	5°42	6°32	2°10	23°48	14°21	21° 1	18°39	20°34	23°37	22°20	20°27	29° 1	F 16
S 17	15 38 28	25°52'38	4♌40	7°27	7°45	2°55	24° 2	14°D21	21° 4	18°40	20°36	23°26	22°16	20°34	29° 6	S 17
S 18	15 42 24	26°50'18	16°34	9°13	8°58	3°41	24°16	14°21	21° 7	18°40	20°37	23°14	22°13	20°41	29°12	S 18
M19	15 46 21	27°47'56	28°26	11° 1	10°11	4°26	24°31	14°21	21°10	18°41	20°38	23° 2	22°10	20°48	29°17	M19
T 20	15 50 17	28°45'33	10♌17	12°52	11°25	5°11	24°45	14°21	21°13	18°41	20°39	22°52	22° 7	20°54	29°23	T 20
W21	15 54 14	29°43'09	22°11	14°45	12°38	5°56	24°59	14°22	21°15	18°42	20°40	22°44	22° 4	21° 1	29°28	W21
T 22	15 58 11	0♌40'43	4♌10	16°40	13°51	6°41	25°13	14°22	21°18	18°43	20°41	22°38	22° 1	21° 8	29°34	T 22
F 23	16 2 7	1°38'16	16°18	18°37	15° 4	7°26	25°27	14°23	21°21	18°44	20°42	22°35	21°57	21°14	29°39	F 23
S 24	16 6 4	2°35'47	28°40	20°36	16°18	8°11	25°41	14°23	21°24	18°44	20°44	22°D34	21°54	21°21	29°45	S 24
S 25	16 10 0	3°33'17	11♌20	22°37	17°31	8°56	25°55	14°24	21°27	18°45	20°45	22°34	21°51	21°28	29°51	S 25
M26	16 13 57	4°30'46	24°23	24°40	18°44	9°41	26° 9	14°25	21°29	18°46	20°46	22°R34	21°48	21°35	29°56	M26
T 27	16 17 53	5°28'13	7♌54	26°45	19°57	10°26	26°23	14°26	21°32	18°47	20°47	22°34	21°45	21°41	0° 2	T 27
W28	16 21 50	6°25'39	21°53	28°51	21°11	11°11	26°37	14°27	21°35	18°48	20°48	22°31	21°41	21°48	0° 8	W28
T 29	16 25 46	7°23'04	6♌21	0♌59	22°24	11°56	26°51	14°28	21°37	18°49	20°49	22°26	21°38	21°55	0°13	T 29
F 30	16 29 43	8°20'28	21°15	3° 8	23°37	12°40	27° 5	14°30	21°40	18°50	20°50	22°18	21°35	22° 2	0°19	F 30
S 31	16 33 40	9♌17'50	6♌26	5♌18	24♌50	13♍25	27♌19	14♌31	21♍43	18♌51	20♍51	22♈ 8	21♈32	22♌ 8	0°25	S 31

Delta T = 92.45 sec

Greg. Calendar

JUNE 1597 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	16 37 36	10♌15'12	21♌44	7♌29	26♌ 4	14♍10	27♌33	14♌33	21♍45	18♌52	20♍52	21°R58	21♈29	22♌15	0°31	S 1
M 2	16 41 33	11°12'34	6♌59	9°41	27°17	14°54	27°47	14°34	21°48	18°53	20°53	21♈48	21°26	22°22	0°37	M 2
T 3	16 45 29	12° 9'54	21°59	11°53	28°30	15°39	28° 1	14°36	21°50	18°54	20°54	21°39	21°22	22°28	0°43	T 3
W 4	16 49 26	13° 7'14	6♌37	14° 5	29°44	16°23	28°15	14°38	21°53	18°55	20°55	21°33	21°19	22°35	0°49	W 4
T 5	16 53 22	14° 4'34	20°48	16°17	0♌57	17° 8	28°28	14°40	21°55	18°56	20°56	21°30	21°16	22°42	0°55	T 5
F 6	16 57 19	15° 1'52	4♈30	18°28	2°10	17°52	28°42	14°42	21°57	18°57	20°57	21°28	21°13	22°49	1° 1	F 6
S 7	17 1 16	15°59'11	17°47	20°39	3°24	18°36	28°56	14°44	22° 0	18°58	20°58	21°28	21°10	22°55	1° 7	S 7
S 8	17 5 12	16°56'29	0♍41	22°48	4°37	19°20	29°10	14°46	22° 2	19° 0	20°58	21°28	21° 7	23° 2	1°13	S 8
M 9	17 9 9	17°53'46	13°15	24°57	5°51	20° 5	29°23	14°48	22° 4	19° 1	20°59	21°27	21° 3	23° 9	1°19	M 9
T 10	17 13 5	18°51'04	25°35	27° 4	7° 4	20°49	29°37	14°51	22° 7	19° 2	21° 0	21°23	21° 0	23°16	1°25	T 10
W11	17 17 2	19°48'20	7♌44	29° 9	8°17	21°33	29°51	14°53	22° 9	19° 3	21° 1	21°17	20°57	23°22	1°31	W11
T 12	17 20 58	20°45'37	19°46	1♌13	9°31	22°17	0♌ 4	14°56	22°11	19° 5	21° 2	21° 9	20°54	23°29	1°37	T 12
F 13	17 24 55	21°42'53	1♌42	3°15	10°44	23° 1	0°18	14°58	22°13	19° 6	21° 3	20°57	20°51	23°36	1°43	F 13
S 14	17 28 51	22°40'09	13°35	5°15	11°58	23°44	0°32	15° 1	22°15	19° 7	21° 3	20°44	20°47	23°42	1°49	S 14
S 15	17 32 48	23°37'25	25°27	7°13	13°11	24°28	0°45	15° 4	22°17	19° 9	21° 4	20°30	20°44	23°49	1°55	S 15
M16	17 36 45	24°34'40	7♌19	9° 8	14°25	25°12	0°59	15° 7	22°19	19°10	21° 5	20°16	20°41	23°56	2° 1	M16
T 17	17 40 41	25°31'54	19°13	11° 2	15°38	25°56	1°12	15°10	22°21	19°12	21° 5	20° 4	20°38	24° 3	2° 7	T 17
W18	17 44 38	26°29'08	1♌10	12°54	16°52	26°39	1°25	15°13	22°23	19°13	21° 6	19°54	20°35	24° 9	2°14	W18
T 19	17 48 34	27°26'22	13°12	14°43	18° 5	27°23	1°39	15°16	22°25	19°15	21° 7	19°47	20°32	24°16	2°20	T 19
F 20	17 52 31	28°23'35	25°23	16°30	19°19	28° 6	1°52	15°20	22°27	19°16	21° 8	19°43	20°28	24°23	2°26	F 20
S 21	17 56 27	29°20'47	7♌47	18°15	20°32	28°49	2° 5	15°23	22°29	19°18	21° 8	19°41	20°25	24°29	2°32	S 21
S 22	18 0 24	0♌17'59	20°26	19°58	21°46	29°33	2°19	15°26	22°30	19°19	21° 9	19°D40	20°22	24°36	2°38	S 22
M23	18 4 20	1°15'11	3♌26	21°38	22°59	0♌16	2°32	15°30	22°32	19°21	21° 9	19°R41	20°19	24°43	2°44	M23
T 24	18 8 17	2°12'22	16°50	23°17	24°13	0°59	2°45	15°34	22°34	19°23	21°10	19°40	20°16	24°50	2°51	T 24
W25	18 12 14	3° 9'33	0♌42	24°53	25°26	1°42	2°58	15°37	22°35	19°24	21°11	19°38	20°13	24°56	2°57	W25
T 26	18 16 10	4° 6'43	15° 2	26°26	26°40	2°25	3°11	15°41	22°37	19°26	21°11	19°33	20° 9	25° 3	3° 3	T 26
F 27	18 20 7	5° 3'53	29°47	27°58	27°53	3° 8	3°24	15°45	22°39	19°28	21°12	19°26	20° 6	25°10	3° 9	F 27
S 28	18 24 3	6° 1'03	14♌53	29°27	29° 7	3°50	3°37	15°49	22°40	19°29	21°12	19°17	20° 3	25°17	3°15	S 28
S 29	18 28 0	6°58'13	0♌10	0♌54	0♌21	4°33	3°50	15°53	22°42	19°31	21°13	19° 7	20° 0	25°23	3°21	S 29
M30	18 31 56	7°55'23	15♌28	2♌18	1♌34	5♌16	4♌ 2	15♌57	22♍43	19♌33	21♍13	18♌57	19♌57	25♌30	3°28	M30

Delta T = 92.33 sec

Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1597  
geocentric

JULY 1597 GC

00:00 UT

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

Delta T = 92.22 sec

Greg. Calendar

AUGUST 1597 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	20 38 6	8 <sup>12</sup> 43	21 <sup>48</sup> 48	18 <sup>33</sup> 33	10 <sup>58</sup> 58	27 <sup>8</sup> 8	10 <sup>11</sup> 15	18 <sup>47</sup> 47	23 <sup>3</sup> 3	20 <sup>12</sup> 37	21 <sup>17</sup> 17	16 <sup>46</sup> 46	18 <sup>15</sup> 15	29 <sup>11</sup> 11	6 <sup>39</sup> 39	F 1
S 2	20 42 3	9 <sup>26</sup> 11	5 <sup>15</sup> 15	17 <sup>52</sup> 52	12 <sup>12</sup> 12	27 <sup>47</sup> 47	10 <sup>25</sup> 25	18 <sup>54</sup> 54	23 <sup>3</sup> 3	20 <sup>39</sup> 39	21 <sup>17</sup> 17	16 <sup>47</sup> 47	18 <sup>12</sup> 12	29 <sup>12</sup> 12	6 <sup>44</sup> 44	S 2
S 3	20 45 59	10 <sup>23</sup> 41	18 <sup>16</sup> 16	17 <sup>8</sup> 8	13 <sup>26</sup> 26	28 <sup>26</sup> 26	10 <sup>35</sup> 35	19 <sup>0</sup> 0	23 <sup>3</sup> 3	20 <sup>41</sup> 41	21 <sup>16</sup> 16	16 <sup>49</sup> 49	18 <sup>9</sup> 9	29 <sup>19</sup> 19	6 <sup>50</sup> 50	S 3
M 4	20 49 56	11 <sup>21</sup> 13	0 <sup>55</sup> 55	16 <sup>22</sup> 22	14 <sup>40</sup> 40	29 <sup>5</sup> 5	10 <sup>45</sup> 45	19 <sup>6</sup> 6	23 <sup>3</sup> 3	20 <sup>44</sup> 44	21 <sup>16</sup> 16	16 <sup>50</sup> 50	18 <sup>5</sup> 5	29 <sup>25</sup> 25	6 <sup>55</sup> 55	M 4
T 5	20 53 52	12 <sup>18</sup> 46	13 <sup>16</sup> 16	15 <sup>34</sup> 34	15 <sup>54</sup> 54	29 <sup>44</sup> 44	10 <sup>55</sup> 55	19 <sup>13</sup> 13	23 <sup>2</sup> 2	20 <sup>46</sup> 46	21 <sup>16</sup> 16	16 <sup>50</sup> 50	18 <sup>2</sup> 2	29 <sup>32</sup> 32	7 <sup>1</sup> 1	T 5
W 6	20 57 49	13 <sup>16</sup> 21	25 <sup>23</sup> 23	14 <sup>45</sup> 45	17 <sup>8</sup> 8	0 <sup>23</sup> 23	11 <sup>5</sup> 5	19 <sup>19</sup> 19	23 <sup>2</sup> 2	20 <sup>48</sup> 48	21 <sup>16</sup> 16	16 <sup>50</sup> 50	17 <sup>59</sup> 59	29 <sup>39</sup> 39	7 <sup>6</sup> 6	W 6
T 7	21 1 46	14 <sup>13</sup> 57	7 <sup>12</sup> 12	13 <sup>56</sup> 56	18 <sup>23</sup> 23	1 <sup>1</sup> 1	11 <sup>15</sup> 15	19 <sup>26</sup> 26	23 <sup>1</sup> 1	20 <sup>50</sup> 50	21 <sup>15</sup> 15	16 <sup>47</sup> 47	17 <sup>56</sup> 56	29 <sup>45</sup> 45	7 <sup>12</sup> 12	T 7
F 8	21 5 42	15 <sup>11</sup> 34	19 <sup>13</sup> 13	13 <sup>8</sup> 8	19 <sup>37</sup> 37	1 <sup>39</sup> 39	11 <sup>24</sup> 24	19 <sup>32</sup> 32	23 <sup>1</sup> 1	20 <sup>52</sup> 52	21 <sup>15</sup> 15	16 <sup>44</sup> 44	17 <sup>53</sup> 53	29 <sup>52</sup> 52	7 <sup>17</sup> 17	F 8
S 9	21 9 39	16 <sup>9</sup> 13	1 <sup>5</sup> 5	12 <sup>22</sup> 22	20 <sup>51</sup> 51	2 <sup>18</sup> 18	11 <sup>34</sup> 34	19 <sup>39</sup> 39	23 <sup>1</sup> 1	20 <sup>55</sup> 55	21 <sup>15</sup> 15	16 <sup>39</sup> 39	17 <sup>50</sup> 50	29 <sup>59</sup> 59	7 <sup>22</sup> 22	S 9
S 10	21 13 35	17 <sup>6</sup> 53	12 <sup>59</sup> 59	11 <sup>38</sup> 38	22 <sup>5</sup> 5	2 <sup>56</sup> 56	11 <sup>43</sup> 43	19 <sup>46</sup> 46	23 <sup>0</sup> 0	20 <sup>57</sup> 57	21 <sup>14</sup> 14	16 <sup>34</sup> 34	17 <sup>46</sup> 46	0 <sup>6</sup> 6	7 <sup>28</sup> 28	S 10
M11	21 17 32	18 <sup>4</sup> 35	24 <sup>59</sup> 59	10 <sup>59</sup> 59	23 <sup>19</sup> 19	3 <sup>34</sup> 34	11 <sup>52</sup> 52	19 <sup>52</sup> 52	22 <sup>59</sup> 59	20 <sup>59</sup> 59	21 <sup>14</sup> 14	16 <sup>29</sup> 29	17 <sup>43</sup> 43	0 <sup>12</sup> 12	7 <sup>33</sup> 33	M11
T 12	21 21 28	19 <sup>2</sup> 18	7 <sup>5</sup> 5	10 <sup>24</sup> 24	24 <sup>34</sup> 34	4 <sup>11</sup> 11	12 <sup>1</sup> 1	19 <sup>59</sup> 59	22 <sup>59</sup> 59	21 <sup>1</sup> 1	21 <sup>13</sup> 13	16 <sup>25</sup> 25	17 <sup>40</sup> 40	0 <sup>19</sup> 19	7 <sup>38</sup> 38	T 12
W13	21 25 25	20 <sup>0</sup> 03	19 <sup>21</sup> 21	9 <sup>55</sup> 55	25 <sup>48</sup> 48	4 <sup>49</sup> 49	12 <sup>10</sup> 10	20 <sup>6</sup> 6	22 <sup>58</sup> 58	21 <sup>4</sup> 4	21 <sup>13</sup> 13	16 <sup>21</sup> 21	17 <sup>37</sup> 37	0 <sup>26</sup> 26	7 <sup>43</sup> 43	W13
T 14	21 29 21	20 <sup>57</sup> 49	1 <sup>17</sup> 17	9 <sup>31</sup> 31	27 <sup>2</sup> 2	5 <sup>26</sup> 26	12 <sup>19</sup> 19	20 <sup>13</sup> 13	22 <sup>57</sup> 57	21 <sup>6</sup> 6	21 <sup>12</sup> 12	16 <sup>19</sup> 19	17 <sup>34</sup> 34	0 <sup>33</sup> 33	7 <sup>48</sup> 48	T 1

# ASTRODIENST EPHEMERIS for the year 1597

## geocentric

SEPTEMBER 1597 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	22 40 19	8♍21'28	8♌58	23♎7	19♍20	16♏11	14♏34	22♍20	22°R36	21♎45	21°R 1	16♏17	16♏37	22♌33	9♏11	M 1
T 2	22 44 16	9°19'43	21°21	24°48	20°34	16°45	14°41	22°28	22°Y35	21°48	21°Y 0	16°17	16°33	2°40	9°16	T 2
W 3	22 48 13	10°17'59	3♏30	26°33	21°48	17°19	14°47	22°35	22°33	21°50	20°59	16°18	16°30	2°47	9°20	W 3
T 4	22 52 9	11°16'18	15°29	28°19	23° 3	17°53	14°52	22°42	22°31	21°52	20°58	16°R18	16°27	2°54	9°23	T 4
F 5	22 56 6	12°14'39	27°23	0♍8	24°17	18°26	14°58	22°50	22°30	21°54	20°58	16°18	16°24	3° 0	9°27	F 5
S 6	23 0 2	13°13'02	9♏16	1°59	25°32	19° 0	15° 4	22°57	22°28	21°56	20°57	16°17	16°21	3° 7	9°31	S 6
S 7	23 3 59	14°11'27	21°12	3°50	26°46	19°33	15° 9	23° 4	22°26	21°58	20°56	16°17	16°17	3°14	9°35	S 7
M 8	23 7 55	15° 9'54	3♏15	5°43	28° 0	20° 5	15°14	23°12	22°25	22° 0	20°55	16°17	16°14	3°20	9°39	M 8
T 9	23 11 52	16° 8'23	15°29	7°35	29°15	20°38	15°19	23°19	22°23	22° 2	20°54	16°D17	16°11	3°27	9°42	T 9
W10	23 15 48	17° 6'54	27°56	9°29	0♏29	21°10	15°24	23°27	22°21	22° 4	20°53	16°17	16° 8	3°34	9°46	W10
T 11	23 19 45	18° 5'27	10♍37	11°22	1°44	21°42	15°28	23°34	22°19	22° 6	20°52	16°R17	16° 5	3°41	9°49	T 11
F 12	23 23 42	19° 4'02	23°34	13°15	2°58	22°14	15°33	23°42	22°17	22° 9	20°51	16°17	16° 2	3°47	9°53	F 12
S 13	23 27 38	20° 2'39	6♏46	15° 8	4°12	22°46	15°37	23°49	22°15	22°11	20°50	16°17	15°58	3°54	9°56	S 13
S 14	23 31 35	21° 1'18	20°12	17° 0	5°27	23°17	15°41	23°56	22°13	22°13	20°49	16°16	15°55	4° 1	9°59	S 14
M15	23 35 31	21°59'59	3♏52	18°52	6°41	23°48	15°45	24° 4	22°11	22°15	20°48	16°16	15°52	4° 8	10° 2	M15
T 16	23 39 28	22°58'41	17°43	20°42	7°56	24°19	15°49	24°11	22° 9	22°17	20°47	16°15	15°49	4°14	10° 6	T 16
W17	23 43 24	23°57'26	1♏43	22°33	9°10	24°49	15°52	24°19	22° 7	22°18	20°46	16°14	15°46	4°21	10° 9	W17
T 18	23 47 21	24°56'12	15°50	24°22	10°25	25°19	15°56	24°26	22° 5	22°20	20°45	16°14	15°42	4°28	10°12	T 18
F 19	23 51 17	25°55'00	0♏1	26°11	11°39	25°49	15°59	24°34	22° 3	22°22	20°44	16°D14	15°39	4°34	10°14	F 19
S 20	23 55 14	26°53'49	14°16	27°58	12°53	26°19	16° 2	24°41	22° 1	22°24	20°43	16°14	15°36	4°41	10°17	S 20
S 21	23 59 11	27°52'40	28°30	29°45	14° 8	26°48	16° 5	24°49	21°59	22°26	20°42	16°15	15°33	4°48	10°20	S 21
M22	0 3 7	28°51'33	12♏42	1♏31	15°22	27°17	16° 7	24°56	21°57	22°28	20°41	16°16	15°30	4°55	10°23	M22
T 23	0 7 4	29°50'28	26°48	3°16	16°37	27°46	16°10	25° 3	21°54	22°30	20°40	16°17	15°27	5° 1	10°25	T 23
W24	0 11 0	0♏49'24	10♏45	5° 0	17°51	28°14	16°12	25°11	21°52	22°32	20°39	16°R17	15°23	5° 8	10°28	W24
T 25	0 14 57	1°48'23	24°31	6°44	19° 5	28°42	16°14	25°18	21°50	22°34	20°38	16°17	15°20	5°15	10°30	T 25
F 26	0 18 53	2°47'23	8♏1	8°26	20°20	29°10	16°16	25°26	21°48	22°35	20°37	16°16	15°17	5°21	10°32	F 26
S 27	0 22 50	3°46'26	21°15	10° 7	21°34	29°38	16°18	25°33	21°45	22°37	20°36	16°15	15°14	5°28	10°35	S 27
S 28	0 26 46	4°45'30	4♏11	11°48	22°49	0♏5	16°19	25°41	21°43	22°39	20°35	16°12	15°11	5°35	10°37	S 28
M29	0 30 43	5°44'37	16°50	13°28	24° 3	0°32	16°20	25°48	21°41	22°41	20°34	16° 9	15° 8	5°42	10°39	M29
T 30	0 34 40	6♏43'46	29♏13	15♏7	25♏17	0♏58	16♏21	25♏55	21°Y38	22♏42	20°Y33	16♏6	15♏4	5♏48	10♏41	T 30

Delta T = 91.98 sec

Greg. Calendar

OCTOBER 1597 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	0 38 36	7♏42'58	11♏23	16♏45	26♏32	1♏24	16♏12	26♏3	21°R36	22♏44	20°R32	16°R 3	15♏1	5♏55	10♏43	W 1
T 2	0 42 33	8°42'12	23°22	18°22	27°46	1°50	16°23	26°10	21°Y34	22°46	20°Y31	16♏1	14°58	6° 2	10°45	T 2
F 3	0 46 29	9°41'28	5♏16	19°59	29° 0	2°16	16°23	26°17	21°31	22°47	20°29	16°D 0	14°55	6° 8	10°46	F 3
S 4	0 50 26	10°40'46	17° 8	21°35	0♏15	2°41	16°24	26°25	21°29	22°49	20°28	16° 1	14°52	6°15	10°48	S 4
S 5	0 54 22	11°40'07	29° 4	23°10	1°29	3° 5	16°R24	26°32	21°26	22°51	20°27	16° 2	14°48	6°22	10°50	S 5
M 6	0 58 19	12°39'30	11♏8	24°44	2°44	3°30	16°24	26°39	21°24	22°52	20°26	16° 3	14°45	6°29	10°51	M 6
T 7	1 2 15	13°38'55	23°25	26°18	3°58	3°53	16°23	26°46	21°22	22°54	20°25	16° 5	14°42	6°35	10°52	T 7
W 8	1 6 12	14°38'23	5♏58	27°51	5°12	4°17	16°23	26°54	21°19	22°55	20°24	16° 6	14°39	6°42	10°54	W 8
T 9	1 10 8	15°37'53	18°51	29°24	6°27	4°40	16°22	27° 1	21°17	22°57	20°23	16°R 7	14°36	6°49	10°55	T 9
F 10	1 14 5	16°37'25	2♏5	0♏55	7°41	5° 2	16°21	27° 8	21°14	22°58	20°21	16° 6	14°33	6°55	10°56	F 10
S 11	1 18 2	17°36'59	15°40	2°26	8°55	5°25	16°20	27°15	21°12	23° 0	20°20	16° 3	14°29	7° 2	10°57	S 11
S 12	1 21 58	18°36'35	29°33	3°57	10°10	5°46	16°18	27°22	21° 9	23° 1	20°19	15°59	14°26	7° 9	10°58	S 12
M13	1 25 55	19°36'13	13♏41	5°26	11°24	6° 7	16°17	27°29	21° 7	23° 3	20°18	15°54	14°23	7°15	10°59	M13
T 14	1 29 51	20°35'53	28° 0	6°55	12°38	6°28	16°15	27°37	21° 5	23° 4	20°17	15°49	14°20	7°22	11° 0	T 14
W15	1 33 48	21°35'35	12♏23	8°24	13°53	6°48	16°13	27°44	21° 2	23° 5	20°16	15°43	14°17	7°29	11° 0	W15
T 16	1 37 44	22°35'19	26°46	9°51	15° 7	7° 8	16°11	27°51	21° 0	23° 7	20°15	15°40	14°14	7°36	11° 1	T 16
F 17	1 41 41	23°35'05	11♏5	11°18	16°21	7°28	16° 9	27°58	20°57	23° 8	20°13	15°37	14°10	7°42	11° 1	F 17
S 18	1 45 37	24°34'52	25°16	12°45	17°36	7°46	16° 6	28° 5	20°55	23° 9	20°12	15°D37	14° 7	7°49	11° 2	S 18
S 19	1 49 34	25°34'41	9♏18	14°10	18°50	8° 5	16° 3	28°11	20°52	23°11	20°11	15°37	14° 4	7°56	11° 2	S 19
M20	1 53 31	26°34'32	23° 9	15°35	20° 4	8°22	16° 0	28°18	20°50	23°12	20°10	15°39	14° 1	8° 2	11° 2	M20
T 21	1 57 27	27°34'24	6♏50	16°59	21°19	8°40	15°57	28°25	20°47	23°13	20° 9	15°40	13°58	8° 9	11° 2	T 21
W22	2 1 24	28°34'18	20°20	18°22	22°33	8°56	15°54	28°32	20°45	23°14	20° 8	15°R40	13°54	8°16	11°R 2	W22
T 23	2 5 20	29°34'13	3°Y40	19°44	23°47	9°12	15°50	28°39	20°43	23°15	20° 7	15°38	13°51	8°23	11° 2	T 23
F 24	2 9 17	0♏34'10	16°48	21° 6	25° 2	9°28	15°47	28°46	20°40	23°16	20° 6	15°35	13°48	8°29	11° 2	F 24
S 25	2 13 13	1°34'10	29°43	22°26	26°16	9°43	15°43	28°52	20°38	23°18	20° 4	15°29	13°45	8°36	11° 2	S 25
S 26	2 17 10	2°34'11	12♏26	23°45	27°30	9°57	15°39	28°59	20°35	23°19	20° 3	15°21	13°42	8°43	11° 2	S 26
M27	2 21 6	3°34'14	24°57	25° 3	28°44	10°11	15°35	29° 5	20°33	23°20	20° 2	15°12	13°39	8°49	11° 1	M27
T 28	2 25 3	4°34'19	7♏14	26°20	29°58	10°24	15°30	29°12	20°31	23°21	20° 1	15° 3	13°35	8°56	11° 1	T 28
W29	2 29 0	5°34'26	19°21	27°35	1♏13	10°37	15°25	29°19	20°28	23°21	20° 0	14°54	13°32	9° 3	11° 0	W29
T 30	2 32 56	6°34'36	1♏19	28°49	2°27	10°49	15°21	29°25	20°26	23°22	19°59	14°46	13°29	9°10	10°59	T 30
F 31	2 36 53	7♏34'47	13♏11	0♏1	3♏41	11♏0	15♏16	29♏31	20°Y24	23♏23	19°Y58	14♏41	13♏26	9♏16	10♏59	F 31

Delta T = 91.87 sec

Greg. Calendar

**ASTRODIENST EPHEMERIS for the year 1597**  
geocentric

**NOVEMBER 1597 GC**

**00:00 UT**

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	2 40 49	8♉35°00	25♏ 1	1♈11	4♌55	11♏10	15°R11	29♐38	20°R21	23♏24	19°R57	14°R37	13♈23	9♏23	10°R58	S 1
S 2	2 44 46	9°35'16	6♏54	2°19	6°10	11°20	15II 5	29°44	20♐19	23°25	19♐56	14°D36	13°20	9°30	10♏57	S 2
M 3	2 48 42	10°35'33	18°56	3°24	7°24	11°29	15° 0	29°50	20°17	23°26	19°55	14♈36	13°16	9°36	10°56	M 3
T 4	2 52 39	11°35'52	1♐10	4°27	8°38	11°38	14°54	29°57	20°15	23°27	19°54	14°37	13°13	9°43	10°54	T 4
W 5	2 56 35	12°36'14	13°44	5°26	9°52	11°46	14°48	0♏ 3	20°12	23°27	19°52	14°R38	13°10	9°50	10°53	W 5
T 6	3 0 32	13°36'37	26°39	6°22	11° 6	11°53	14°42	0° 9	20°10	23°28	19°51	14°37	13° 7	9°57	10°52	T 6
F 7	3 4 29	14°37'02	10♏ 1	7°14	12°20	11°59	14°36	0°15	20° 8	23°29	19°50	14°34	13° 4	10° 3	10°50	F 7
S 8	3 8 25	15°37'29	23°49	8° 2	13°34	12° 4	14°30	0°21	20° 6	23°29	19°49	14°29	13° 0	10°10	10°49	S 8
S 9	3 12 22	16°37'58	8♉ 3	8°45	14°49	12° 9	14°24	0°27	20° 4	23°30	19°48	14°21	12°57	10°17	10°47	S 9
M10	3 16 18	17°38'28	22°36	9°22	16° 3	12°13	14°17	0°33	20° 2	23°30	19°47	14°12	12°54	10°23	10°46	M10
T 11	3 20 15	18°39'01	7♈23	9°54	17°17	12°16	14°11	0°38	19°59	23°31	19°46	14° 1	12°51	10°30	10°44	T 11
W12	3 24 11	19°39'34	22°15	10°18	18°31	12°19	14° 4	0°44	19°57	23°31	19°45	13°51	12°48	10°37	10°42	W12
T 13	3 28 8	20°40'10	7♏ 3	10°34	19°45	12°20	13°57	0°50	19°55	23°32	19°44	13°43	12°45	10°43	10°40	T 13
F 14	3 32 5	21°40'46	21°39	10°R43	20°59	12°R21	13°50	0°56	19°53	23°32	19°43	13°37	12°41	10°50	10°38	F 14
S 15	3 36 1	22°41'23	6♏ 0	10°42	22°13	12°21	13°43	1° 1	19°51	23°33	19°43	13°34	12°38	10°57	10°36	S 15
S 16	3 39 58	23°42'02	20° 2	10°31	23°27	12°20	13°36	1° 7	19°50	23°33	19°42	13°D33	12°35	11° 4	10°34	S 16
M17	3 43 54	24°42'42	3♈47	10°10	24°41	12°18	13°28	1°12	19°48	23°33	19°41	13°33	12°32	11°10	10°32	M17
T 18	3 47 51	25°43'23	17°13	9°38	25°55	12°16	13°21	1°17	19°46	23°34	19°40	13°R33	12°29	11°17	10°29	T 18
W19	3 51 47	26°44'04	0♐25	8°55	27° 9	12°12	13°13	1°23	19°44	23°34	19°39	13°32	12°26	11°24	10°27	W19
T 20	3 55 44	27°44'47	13°23	8° 2	28°23	12° 8	13° 6	1°28	19°42	23°34	19°38	13°28	12°22	11°30	10°24	T 20
F 21	3 59 40	28°45'32	26°10	7° 0	29°37	12° 3	12°58	1°33	19°40	23°34	19°37	13°22	12°19	11°37	10°22	F 21
S 22	4 3 37	29°46'17	8♏46	5°49	0♏51	11°57	12°50	1°38	19°39	23°34	19°36	13°12	12°16	11°44	10°19	S 22
S 23	4 7 33	0♐47°03	21°13	4°32	2° 5	11°50	12°42	1°43	19°37	23°35	19°36	13° 0	12°13	11°51	10°16	S 23
M24	4 11 30	1°47'51	3II30	3°10	3°19	11°42	12°35	1°48	19°35	23°35	19°35	12°46	12°10	11°57	10°14	M24
T 25	4 15 27	2°48'40	15°39	1°48	4°33	11°33	12°27	1°53	19°34	23°35	19°34	12°32	12° 6	12° 4	10°11	T 25
W26	4 19 23	3°49'30	27°40	0°26	5°47	11°24	12°19	1°58	19°32	23°R35	19°33	12°18	12° 3	12°11	10° 8	W26
T 27	4 23 20	4°50'22	9♏35	29♉ 9	7° 0	11°14	12°11	2° 2	19°31	23°35	19°32	12° 6	12° 0	12°17	10° 5	T 27
F 28	4 27 16	5°51'15	21°25	27°59	8°14	11° 3	12° 3	2° 7	19°29	23°35	19°32	11°56	11°57	12°24	10° 2	F 28
S 29	4 31 13	6°52'09	3♏14	26°57	9°28	10°51	11°54	2°11	19°28	23°35	19°31	11°49	11°54	12°31	9°59	S 29
S 30	4 35 9	7♈53°04	15♏ 5	26♉ 5	10♏42	10♏38	11II46	2♏16	19♐26	23♏34	19♐30	11♈45	11♈51	12♏37	9♏55	S 30

Delta T = 91.75 sec

Greg. Calendar

**DECEMBER 1597 GC**

**00:00 UT**

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	4 39 6	8♈54°01	27♏ 3	25°R24	11♏55	10°R24	11°R38	2♏20	19°R25	23°R34	19°R30	11°R44	11♈47	12♏44	9°R52	M 1
T 2	4 43 3	9°54'58	9♐14	24♉54	13° 9	10♏10	11II30	2°24	19°Y24	23♏34	19°Y29	11♈43	11°44	12°51	9♏49	T 2
W 3	4 46 59	10°55'57	21°42	24°36	14°23	9°55	11°22	2°29	19°22	23°34	19°28	11°43	11°41	12°58	9°45	W 3
T 4	4 50 56	11°56'57	4♏33	24°D29	15°36	9°39	11°14	2°33	19°21	23°34	19°28	11°42	11°38	13° 4	9°42	T 4
F 5	4 54 52	12°57'59	17°52	24°32	16°50	9°22	11° 5	2°37	19°20	23°33	19°27	11°39	11°35	13°11	9°38	F 5
S 6	4 58 49	13°59'01	1♉40	24°45	18° 3	9° 5	10°57	2°41	19°19	23°33	19°26	11°33	11°31	13°18	9°35	S 6
S 7	5 2 45	15° 0'05	15°58	25° 7	19°17	8°47	10°49	2°44	19°18	23°33	19°26	11°24	11°28	13°24	9°31	S 7
M 8	5 6 42	16° 1'09	0♐42	25°36	20°31	8°28	10°41	2°48	19°17	23°32	19°25	11°13	11°25	13°31	9°28	M 8
T 9	5 10 38	17° 2'14	15°46	26°13	21°44	8° 8	10°33	2°52	19°16	23°32	19°25	11° 1	11°22	13°38	9°24	T 9
W10	5 14 35	18° 3'21	0♏59	26°56	22°58	7°48	10°25	2°55	19°15	23°31	19°24	10°50	11°19	13°45	9°20	W10
T 11	5 18 32	19° 4'27	16°10	27°45	24°11	7°28	10°17	2°59	19°14	23°31	19°24	10°40	11°16	13°51	9°17	T 11
F 12	5 22 28	20° 5'35	1♏ 9	28°39	25°24	7° 7	10° 9	3° 2	19°13	23°30	19°23	10°32	11°12	13°58	9°13	F 12
S 13	5 26 25	21° 6'42	15°48	29°38	26°38	6°45	10° 1	3° 6	19°12	23°30	19°23	10°28	11° 9	14° 5	9° 9	S 13
S 14	5 30 21	22° 7'50	0♈ 4	0♐40	27°51	6°23	9°53	3° 9	19°12	23°29	19°22	10°26	11° 6	14°11	9° 5	S 14
M15	5 34 18	23° 8'58	13°54	1°45	29° 4	6° 1	9°45	3°12	19°11	23°29	19°22	10°D26	11° 3	14°18	9° 1	M15
T 16	5 38 14	24°10'06	27°21	2°54	0♏17	5°38	9°38	3°15	19°10	23°28	19°21	10°R26	11° 0	14°25	8°57	T 16
W17	5 42 11	25°11'14	10♐26	4° 5	1°31	5°15	9°30	3°18	19°10	23°27	19°21	10°25	10°57	14°31	8°53	W17
T 18	5 46 7	26°12'22	23°14	5°18	2°44	4°52	9°23	3°21	19° 9	23°26	19°21	10°22	10°53	14°38	8°49	T 18
F 19	5 50 4	27°13'31	5♏47	6°34	3°57	4°28	9°15	3°23	19° 9	23°26	19°20	10°16	10°50	14°45	8°45	F 19
S 20	5 54 1	28°14'39	18° 9	7°51	5°10	4° 4	9° 8	3°26	19° 8	23°25	19°20	10° 7	10°47	14°52	8°41	S 20
S 21	5 57 57	29°15'48	0II21	9° 9	6°23	3°41	9° 1	3°28	19° 8	23°24	19°20	9°56	10°44	14°58	8°37	S 21
M22	6 1 54	0♏16'57	12°27	10°30	7°36	3°17	8°53	3°31	19° 7	23°23	19°19	9°43	10°41	15° 5	8°33	M22
T 23	6 5 50	1°18'06	24°27	11°51	8°48	2°53	8°46	3°33	19° 7	23°22	19°19	9°30	10°38	15°12	8°28	T 23
W24	6 9 47	2°19'15	6♏22	13°13	10° 1	2°29	8°39	3°35	19° 7	23°22	19°19	9°16	10°34	15°18	8°24	W24
T 25	6 13 43	3°20'25	18°13	14°37	11°14	2° 5	8°33	3°37	19° 7	23°21	19°19	9° 5	10°31	15°25	8°20	T 25
F 26	6 17 40	4°21'34	0♏ 3	16° 1	12°27	1°42	8°26	3°39	19° 6	23°20	19°18	8°55	10°28	15°32	8°16	F 26
S 27	6 21 37	5°22'44	11°53	17°26	13°39	1°18	8°20	3°41	19° 6	23°19	19°18	8°49	10°25	15°38	8°12	S 27
S 28	6 25 33	6°23'53	23°46	18°52	14°52	0°55	8°13	3°43	19°D 6	23°18	19°18	8°45	10°22	15°45	8° 8	S 28
M29	6 29 30	7°25'03	5♐46	20°19	16° 4	0°32	8° 7	3°45	19° 6	23°17	19°18	8°D44	10°18	15°52	8° 3	M29
T 30	6 33 26	8°26'13	17°56	21°46	17°17	0° 9	8° 1	3°46	19° 6	23°16	19°18	8°44	10°15	15°59	7°59	T 30
W31	6 37 23	9♏27°24	0♏21	23♈14	18♏29	29II47	7II55	3♏48	19♐ 6	23♏14	19♐18	8♈45	10♈12	16♏ 5	7♏55	W31

Delta T = 91.64 sec

Greg. Calendar