



Astrodienst Ephemeris Tables for the year 2282

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 2282
geocentric

JANUARY 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	6 42 38	10♌24'48	22♏36	22♌36	28♌17	11♏8	6♏23	24♌16	19°R 9	26♏58	18♏44	12°R 0	10♏54	7♏46	7°R37	S 1
M 2	6 46 35	11°25'55	4♏49	24° 2	29°32	11°55	6°36	24°23	19♏7	26°59	18°46	11♏59	10°51	7°53	7♏35	M 2
T 3	6 50 32	12°27'03	16°48	25°29	0♏47	12°42	6°50	24°30	19° 4	27° 0	18°47	11°D59	10°48	7°59	7°32	T 3
W 4	6 54 28	13°28'12	28°39	26°56	2° 2	13°29	7° 3	24°36	19° 2	27° 0	18°49	12° 0	10°44	8° 6	7°29	W 4
T 5	6 58 25	14°29'20	10♏28	28°24	3°17	14°16	7°17	24°43	19° 0	27° 1	18°50	12° 2	10°41	8°13	7°27	T 5
F 6	7 2 21	15°30'30	22°18	29°52	4°32	15° 4	7°30	24°50	18°58	27° 2	18°52	12° 3	10°38	8°19	7°24	F 6
S 7	7 6 18	16°31'39	4♌15	1♌21	5°47	15°51	7°44	24°57	18°55	27° 3	18°54	12° 5	10°35	8°26	7°22	S 7
S 8	7 10 14	17°32'49	16°23	2°50	7° 2	16°38	7°58	25° 4	18°53	27° 3	18°55	12°R 5	10°32	8°33	7°19	S 8
M 9	7 14 11	18°33'59	28°44	4°20	8°17	17°25	8°12	25°10	18°51	27° 4	18°57	12° 4	10°28	8°39	7°17	M 9
T 10	7 18 7	19°35'09	11♌20	5°50	9°32	18°13	8°26	25°17	18°49	27° 5	18°58	12° 0	10°25	8°46	7°15	T 10
W11	7 22 4	20°36'20	24°12	7°21	10°48	19° 0	8°39	25°24	18°47	27° 5	19° 0	11°55	10°22	8°53	7°12	W11
T 12	7 26 1	21°37'30	7♏20	8°52	12° 3	19°47	8°53	25°30	18°45	27° 6	19° 2	11°49	10°19	8°59	7°10	T 12
F 13	7 29 57	22°38'39	20°43	10°24	13°18	20°34	9° 7	25°37	18°43	27° 6	19° 3	11°41	10°16	9° 6	7° 8	F 13
S 14	7 33 54	23°39'49	4♏18	11°56	14°33	21°22	9°21	25°43	18°41	27° 7	19° 5	11°34	10°13	9°13	7° 6	S 14
S 15	7 37 50	24°40'58	18° 4	13°28	15°48	22° 9	9°35	25°50	18°39	27° 7	19° 7	11°28	10° 9	9°19	7° 4	S 15
M16	7 41 47	25°42'06	1♏57	15° 1	17° 2	22°56	9°49	25°56	18°37	27° 8	19° 8	11°23	10° 6	9°26	7° 2	M16
T 17	7 45 43	26°43'14	15°57	16°34	18°17	23°44	10° 3	26° 3	18°35	27° 8	19°10	11°21	10° 3	9°33	7° 0	T 17
W18	7 49 40	27°44'21	0♏2	18° 8	19°32	24°31	10°17	26° 9	18°33	27° 9	19°12	11°D20	10° 0	9°39	6°58	W18
T 19	7 53 36	28°45'28	14°11	19°42	20°47	25°18	10°31	26°16	18°32	27° 9	19°13	11°21	9°57	9°46	6°56	T 19
F 20	7 57 33	29°46'33	28°21	21°17	22° 2	26° 6	10°45	26°22	18°30	27° 9	19°15	11°22	9°54	9°53	6°55	F 20
S 21	8 1 30	0♏47'39	12♏33	22°52	23°17	26°53	11° 0	26°28	18°28	27° 9	19°17	11°R23	9°50	9°59	6°53	S 21
S 22	8 5 26	1°48'43	26°43	24°28	24°32	27°41	11°14	26°35	18°26	27°10	19°19	11°22	9°47	10° 6	6°52	S 22
M23	8 9 23	2°49'47	10♏47	26° 5	25°47	28°28	11°28	26°41	18°25	27°10	19°20	11°19	9°44	10°13	6°50	M23
T 24	8 13 19	3°50'50	24°43	27°41	27° 1	29°15	11°42	26°47	18°23	27°10	19°22	11°13	9°41	10°19	6°49	T 24
W25	8 17 16	4°51'53	8♏27	29°19	28°16	0♏3	11°56	26°53	18°22	27°10	19°24	11° 4	9°38	10°26	6°47	W25
T 26	8 21 12	5°52'55	21°54	0♏57	29°31	0°50	12°10	26°59	18°20	27°10	19°26	10°55	9°34	10°33	6°46	T 26
F 27	8 25 9	6°53'56	5♏3	2°35	0♏45	1°37	12°25	27° 5	18°19	27°10	19°27	10°44	9°31	10°39	6°45	F 27
S 28	8 29 6	7°54'56	17°52	4°14	2° 0	2°25	12°39	27°11	18°17	27°R10	19°29	10°35	9°28	10°46	6°43	S 28
S 29	8 33 2	8°55'56	0♏22	5°54	3°15	3°12	12°53	27°17	18°16	27°10	19°31	10°26	9°25	10°53	6°42	S 29
M30	8 36 59	9°56'56	12°35	7°34	4°29	3°59	13° 7	27°23	18°15	27°10	19°33	10°20	9°22	10°59	6°41	M30
T 31	8 40 55	10♏57'55	24♏36	9♏15	5♏44	4♏47	13♏21	27♏29	18♏13	27♏10	19♏35	10♏16	9♏19	11♏6	6♏40	T 31

Delta T = 267.04 sec

FEBRUARY 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	8 44 52	11♏58'53	6♏27	10♏57	6♏59	5♏34	13♏36	27♏34	18°R12	27°R10	19°36	10°R14	9♏15	11♏13	6°R39	W 1
T 2	8 48 48	12°59'51	18°16	12°39	8°13	6°21	13°50	27°40	18♏11	27°10	19°38	10°D14	9°12	11°19	6♏39	T 2
F 3	8 52 45	14° 0'48	0♏6	14°22	9°28	7° 9	14° 4	27°46	18°10	27°10	19°40	10°I15	9° 9	11°26	6°38	F 3
S 4	8 56 41	15° 1'45	12° 4	16° 6	10°42	7°56	14°18	27°51	18° 9	27°10	19°42	10°R15	9° 6	11°33	6°37	S 4
S 5	9 0 38	16° 2'41	24°15	17°50	11°56	8°43	14°33	27°57	18° 8	27° 9	19°44	10°14	9° 3	11°39	6°37	S 5
M 6	9 4 35	17° 3'36	6♌42	19°35	13°11	9°31	14°47	28° 2	18° 7	27° 9	19°45	10°11	9° 0	11°46	6°36	M 6
T 7	9 8 31	18° 4'30	19°29	21°20	14°25	10°18	15° 1	28° 8	18° 6	27° 9	19°47	10° 5	8°56	11°53	6°36	T 7
W 8	9 12 28	19° 5'24	2♏38	23° 6	15°40	11° 5	15°15	28°13	18° 5	27° 8	19°49	9°56	8°53	11°59	6°35	W 8
T 9	9 16 24	20° 6'16	16° 8	24°53	16°54	11°53	15°30	28°18	18° 4	27° 8	19°51	9°46	8°50	12° 6	6°35	T 9
F 10	9 20 21	21° 7'07	29°57	26°40	18° 8	12°40	15°44	28°23	18° 3	27° 8	19°53	9°34	8°47	12°13	6°35	F 10
S 11	9 24 17	22° 7'57	14♏1	28°28	19°23	13°27	15°58	28°28	18° 3	27° 7	19°55	9°22	8°44	12°19	6°34	S 11
S 12	9 28 14	23° 8'45	28°14	0♏16	20°37	14°14	16°12	28°34	18° 2	27° 7	19°56	9°11	8°40	12°26	6°34	S 12
M13	9 32 10	24° 9'33	12♏32	2° 4	21°51	15° 2	16°27	28°39	18° 1	27° 6	19°58	9° 3	8°37	12°33	6°D34	M13
T 14	9 36 7	25°10'18	26°49	3°52	23° 5	15°49	16°41	28°43	18° 1	27° 6	20° 0	8°58	8°34	12°39	6°34	T 14
W15	9 40 3	26°11'02	11♏2	5°41	24°19	16°36	16°55	28°48	18° 0	27° 5	20° 2	8°55	8°31	12°46	6°34	W15
T 16	9 44 0	27°11'45	25° 9	7°29	25°33	17°23	17° 9	28°53	18° 0	27° 4	20° 4	8°D54	8°28	12°53	6°35	T 16
F 17	9 47 57	28°12'26	9♏10	9°17	26°47	18°10	17°23	28°58	17°59	27° 4	20° 5	8°R54	8°25	12°59	6°35	F 17
S 18	9 51 53	29°13'05	23° 3	11° 5	28° 1	18°57	17°37	29° 2	17°59	27° 3	20° 7	8°54	8°21	13° 6	6°35	S 18
S 19	9 55 50	0♏13'43	6♏49	12°51	29°15	19°45	17°52	29° 7	17°59	27° 2	20° 9	8°51	8°18	13°13	6°36	S 19
M20	9 59 46	1°14'19	20°28	14°37	0♏29	20°32	18° 6	29°12	17°58	27° 2	20°11	8°46	8°15	13°19	6°36	M20
T 21	10 3 43	2°14'53	3♏57	16°21	1°43	21°19	18°20	29°16	17°58	27° 1	20°13	8°38	8°12	13°26	6°37	T 21
W22	10 7 39	3°15'26	17°16	18° 2	2°56	22° 6	18°34	29°20	17°58	27° 0	20°14	8°27	8° 9	13°33	6°37	W22
T 23	10 11 36	4°15'57	0♏23	19°42	4°10	22°53	18°48	29°25	17°58	26°59	20°16	8°14	8° 6	13°39	6°38	T 23
F 24	10 15 33	5°16'26	13°16	21°18	5°24	23°40	19° 2	29°29	17°58	26°58	20°18	8° 0	8° 2	13°46	6°39	F 24
S 25	10 19 29	6°16'54	25°54	22°51	6°37	24°27	19°16	29°33	17°D58	26°57	20°20	7°47	7°59	13°53	6°40	S 25
S 26	10 23 26	7°17'20	8♏18	24°20	7°51	25°14	19°30	29°37	17°58	26°57	20°21	7°35	7°56	13°59	6°40	S 26
M27	10 27 22	8°17'45	20°28	25°45	9° 4	26° 1	19°44	29°41	17°58	26°56	20°23	7°25	7°53	14° 6	6°41	M27
T 28	10 31 19	9♏18'09	2♏26	27♏4	10♏18	26♏47	19♏57	29♏45	17♏58	26♏55	20♏25	7♏19	7♏50	14♏13	6♏42	T 28

Delta T = 267.17 sec

ASTRODIENST EPHEMERIS for the year 2282

geocentric

MARCH 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	10 35 15	10°18'31"	14°11'17"	28°17'17"	11°17'31"	27°17'34"	20°11'11"	29°17'49"	17°11'58"	26°17'54"	20°17'27"	7°17'15"	7°11'46"	14°11'19"	6°11'44"	W 1
T 2	10 39 12	11°18'52"	26° 5'	29°23'	12°44'	28°21'	20°25'	29°52'	17°59'	26°15'53"	20°28'	7°11'13"	7°43'	14°26'	6°45'	T 2
F 3	10 43 8	12°19'11"	7°17'54"	0°17'22"	13°58'	29° 8'	20°39'	29°56'	17°59'	26°52'	20°30'	7°13'	7°40'	14°33'	6°46'	F 3
S 4	10 47 5	13°19'29"	19°51'	1°13'	15°11'	29°55'	20°53'	29°59'	17°59'	26°51'	20°32'	7°13'	7°37'	14°39'	6°47'	S 4
S 5	10 51 1	14°19'46"	2°3'	1°56'	16°24'	0°17'41"	21° 6'	0°3'	18° 0'	26°50'	20°33'	7°12'	7°34'	14°46'	6°49'	S 5
M 6	10 54 58	15°20'01"	14°29'	2°31'	17°37'	1°28'	21°20'	0° 6'	18° 0'	26°48'	20°35'	7° 9'	7°31'	14°52'	6°50'	M 6
T 7	10 58 55	16°20'14"	27°20'	2°56'	18°50'	2°15'	21°34'	0°10'	18° 1'	26°47'	20°37'	7° 3'	7°27'	14°59'	6°52'	T 7
W 8	11 2 51	17°20'26"	10°13'36"	3°12'	20° 3'	3° 1'	21°47'	0°13'	18° 1'	26°46'	20°39'	6°55'	7°24'	15° 6'	6°53'	W 8
T 9	11 6 48	18°20'37"	24°18'	3°18'	21°16'	3°48'	22° 1'	0°16'	18° 2'	26°45'	20°40'	6°45'	7°21'	15°12'	6°55'	T 9
F 10	11 10 44	19°20'45"	8°17'24"	3°15'	22°29'	4°35'	22°14'	0°19'	18° 3'	26°44'	20°42'	6°33'	7°18'	15°19'	6°57'	F 10
S 11	11 14 41	20°20'52"	22°51'	3° 3'	23°42'	5°21'	22°28'	0°22'	18° 3'	26°42'	20°43'	6°21'	7°15'	15°26'	6°59'	S 11
S 12	11 18 37	21°20'57"	7°17'30"	2°43'	24°54'	6° 8'	22°41'	0°25'	18° 4'	26°41'	20°45'	6°10'	7°11'	15°32'	7° 1'	S 12
M13	11 22 34	22°21'00"	22°14'	2°14'	26° 7'	6°54'	22°54'	0°27'	18° 5'	26°40'	20°47'	6° 2'	7° 8'	15°39'	7° 2'	M13
T 14	11 26 30	23°21'01"	6°17'57"	1°38'	27°19'	7°41'	23° 8'	0°30'	18° 6'	26°39'	20°48'	5°56'	7° 5'	15°46'	7° 5'	T 14
W15	11 30 27	24°21'00"	21°30'	0°55'	28°32'	8°27'	23°21'	0°33'	18° 7'	26°37'	20°50'	5°54'	7° 2'	15°52'	7° 7'	W15
T 16	11 34 24	25°20'57"	5°11'50"	0° 6'	29°44'	9°14'	23°34'	0°35'	18° 8'	26°36'	20°51'	5°D53"	6°59'	15°59'	7° 9'	T 16
F 17	11 38 20	26°20'51"	19°56'	29°17'14"	0°18'57"	10° 0'	23°47'	0°37'	18° 9'	26°35'	20°53'	5°R53"	6°56'	16° 6'	7°11'	F 17
S 18	11 42 17	27°20'44"	3°17'46"	28°18'	2° 9'	10°46'	24° 1'	0°40'	18°10'	26°33'	20°54'	5°53'	6°52'	16°12'	7°13'	S 18
S 19	11 46 13	28°20'34"	17°21'	27°21'	3°21'	11°33'	24°14'	0°42'	18°11'	26°32'	20°56'	5°52'	6°49'	16°19'	7°16'	S 19
M20	11 50 10	29°20'22"	0°12'43"	26°23'	4°33'	12°19'	24°27'	0°44'	18°12'	26°30'	20°57'	5°48'	6°46'	16°26'	7°18'	M20
T 21	11 54 6	0°17'07"	13°51'	25°27'	5°45'	13° 5'	24°39'	0°46'	18°14'	26°29'	20°59'	5°41'	6°43'	16°32'	7°20'	T 21
W22	11 58 3	1°19'51"	26°48'	24°32'	6°57'	13°51'	24°52'	0°48'	18°15'	26°28'	21° 0'	5°32'	6°40'	16°39'	7°23'	W22
T 23	12 1 59	2°19'32"	9°17'33"	23°40'	8° 9'	14°37'	25° 5'	0°50'	18°16'	26°26'	21° 2'	5°21'	6°37'	16°46'	7°25'	T 23
F 24	12 5 56	3°19'11"	22° 7'	22°52'	9°21'	15°23'	25°18'	0°51'	18°18'	26°25'	21° 3'	5°10'	6°33'	16°52'	7°28'	F 24
S 25	12 9 53	4°18'48"	4°18'48"	22° 8'	10°32'	16° 9'	25°31'	0°53'	18°19'	26°23'	21° 5'	4°58'	6°30'	16°59'	7°31'	S 25
S 26	12 13 49	5°18'23"	16°42'	21°30'	11°44'	16°55'	25°43'	0°55'	18°21'	26°22'	21° 6'	4°48'	6°27'	17° 6'	7°33'	S 26
M27	12 17 46	6°17'56"	28°44'	20°58'	12°55'	17°41'	25°56'	0°56'	18°22'	26°20'	21° 7'	4°40'	6°24'	17°12'	7°36'	M27
T 28	12 21 42	7°17'27"	10°11'38"	20°31'	14° 7'	18°27'	26° 8'	0°57'	18°24'	26°19'	21° 9'	4°35'	6°21'	17°19'	7°39'	T 28
W29	12 25 39	8°16'57"	22°27'	20°10'	15°18'	19°13'	26°21'	0°58'	18°25'	26°17'	21°10'	4°32'	6°17'	17°26'	7°42'	W29
T 30	12 29 35	9°16'24"	4°17'14"	19°55'	16°29'	19°59'	26°33'	1° 0'	18°27'	26°16'	21°11'	4°D31"	6°14'	17°32'	7°45'	T 30
F 31	12 33 32	10°15'50"	16°17' 3'	19°17'46"	17°18'40"	20°17'45"	26°17'45"	1°3'	18°29'	26°14'	21°11'13"	4°11'31"	6°11'11"	17°11'39"	7°11'48"	F 31

Delta T = 267.29 sec

APRIL 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	12 37 28	11°15'14"	27°17'59"	19°D44"	18°18'51"	21°17'30"	26°17'57"	1°3'	18°33'	26°17'12"	21°17'14"	4°11'32"	6°11' 8"	17°11'45"	7°11'51"	S 1
S 2	12 41 25	12°14'37"	10°17'38"	19°17'47"	20° 2'	22°16'	27° 9'	1° 2'	18°33'	26°11'	21°15'	4°R33"	6° 5'	17°52'	7°54'	S 2
M 3	12 45 22	13°13'57"	22°33'	19°55'	21°13'	23° 2'	27°21'	1° 3'	18°34'	26° 9'	21°17'	4°33'	6° 2'	17°59'	7°57'	M 3
T 4	12 49 18	14°13'16"	5°17'21"	20° 9'	22°24'	23°47'	27°33'	1° 4'	18°36'	26° 8'	21°18'	4°30'	5°58'	18° 5'	8° 1'	T 4
W 5	12 53 15	15°12'33"	18°35'	20°27'	23°34'	24°33'	27°45'	1° 4'	18°38'	26° 6'	21°19'	4°26'	5°55'	18°12'	8° 4'	W 5
T 6	12 57 11	16°11'48"	2°17'17"	20°51'	24°45'	25°18'	27°57'	1° 5'	18°40'	26° 4'	21°20'	4°20'	5°52'	18°19'	8° 7'	T 6
F 7	13 1 8	17°11'02"	16°28'	21°19'	25°55'	26° 4'	28° 9'	1° 5'	18°42'	26° 3'	21°21'	4°13'	5°49'	18°25'	8°11'	F 7
S 8	13 5 4	18°10'13"	1°17' 3'	21°52'	27° 5'	26°49'	28°20'	1° 5'	18°44'	26° 1'	21°23'	4° 5'	5°46'	18°32'	8°14'	S 8
S 9	13 9 1	19° 9'22"	15°56'	22°29'	28°16'	27°35'	28°32'	1° 5'	18°47'	26° 0'	21°24'	3°59'	5°43'	18°39'	8°18'	S 9
M10	13 12 57	20° 8'30"	0°18'59"	23° 9'	29°26'	28°20'	28°43'	1°R 5'	18°49'	25°58'	21°25'	3°53'	5°39'	18°45'	8°21'	M10
T 11	13 16 54	21° 7'35"	16° 3'	23°54'	0°11'36"	29° 5'	28°55'	1° 5'	18°51'	25°56'	21°26'	3°50'	5°36'	18°52'	8°25'	T 11
W12	13 20 50	22° 6'39"	0°11'59"	24°42'	1°45'	29°50'	29° 6'	1° 5'	18°53'	25°55'	21°27'	3°D49"	5°33'	18°59'	8°28'	W12
T 13	13 24 47	23° 5'40"	15°39'	25°33'	2°55'	0°18'36"	29°17'	1° 5'	18°56'	25°53'	21°28'	3°49'	5°30'	19° 5'	8°32'	T 13
F 14	13 28 44	24° 4'39"	29°59'	26°27'	4° 5'	1°21'	29°28'	1° 4'	18°58'	25°51'	21°29'	3°51'	5°27'	19°12'	8°36'	F 14
S 15	13 32 40	25° 3'35"	13°17'58"	27°24'	5°14'	2° 6'	29°39'	1° 4'	19° 0'	25°50'	21°30'	3°52'	5°23'	19°19'	8°39'	S 15
S 16	13 36 37	26° 2'30"	27°35'	28°24'	6°24'	2°51'	29°50'	1° 3'	19° 3'	25°48'	21°31'	3°R52"	5°20'	19°25'	8°43'	S 16
M17	13 40 33	27° 1'22"	10°12'52"	29°27'	7°33'	3°36'	0°11' 1'	1° 3'	19° 5'	25°46'	21°32'	3°51'	5°17'	19°32'	8°47'	M17
T 18	13 44 30	28° 0'11"	23°51'	0°17'33"	8°42'	4°21'	0°11'	1° 2'	19° 8'	25°45'	21°33'	3°49'	5°14'	19°39'	8°51'	T 18
W19	13 48 26	28°58'59"	6°17'34"	1°41'	9°51'	5° 6'	0°22'	1° 1'	19°10'	25°43'	21°34'	3°45'	5°11'	19°45'	8°55'	W19
T 20	13 52 23	29°57'44"	19° 3'	2°51'	10°59'	5°51'	0°32'	1° 0'	19°13'	25°42'	21°34'	3°39'	5° 8'	19°52'	8°59'	T 20
F 21	13 56 19	0°18'56'27"	1°12'21"	4° 4'	12° 8'	6°35'	0°43'	0°59'	19°15'	25°40'	21°35'	3°34'	5° 4'	19°58'	9° 3'	F 21
S 22	14 0 16	1°55'08"	13°30'	5°18'	13°16'	7°20'	0°53'	0°58'	19°18'	25°38'	21°36'	3°28'	5° 1'	20° 5'	9° 7'	S 22
S 23	14 4 13	2°53'46"	25°30'	6°35'	14°25'	8° 5'	1° 3'	0°57'	19°21'	25°37'	21°37'	3°23'	4°58'	20°12'	9°11'	S 23
M24	14 8 9	3°52'23"	7°11'24"	7°55'	15°33'	8°49'	1°13'	0°55'	19°23'	25°35'	21°38'	3°19'	4°55'	20°18'	9°15'	M24
T 25	14 12 6	4°50'58"	19°14'	9°16'	16°41'	9°34'	1°23'	0°54'	19°26'	25°33'	21°38'	3°17'	4°52'	20°25'	9°19'	T 25
W26	14 16 2	5°49'32"	1°17' 1'	10°39'	17°49'	10°18'	1°33'	0°52'	19°29'	25°32'	21°39'	3°D16"	4°48'	20°32'	9°23'	W26
T 27	14 19 59	6°48'03"	12°49'	12° 4'	18°56'	11° 3'	1°43'	0°51'	19°32'	25°30'	21°40'	3°16'	4°45'	20°38'	9°27'	T 27
F 28	14 23 55	7°46'33"	24°41'	13°31'	20° 4'	11°47'	1°52'	0°49'	19°34'	25°29'	21°41'	3°18'	4°42'	20°45'	9°32'	F 28
S 29	14 27 52	8°45'01"	6°13'40"	15° 0'	21°11'	12°32'	2° 2'	0°47'	19°37'	25°27'	21°41'	3°19'	4°39'	20°52'	9°36'	S 29
S 30	14 31 48	9°18'43'27"	18°13'49"	16°17'30"	22°11'18"	13°18'16"	2°11'11"	0°3'45"	19°40'	25°25'	21°42'	3°11'21"	4°11'36"	20°11'58"	9°11'40"	S 30

Delta T = 267.43 sec

ASTRODIENST EPHEMERIS for the year 2282
geocentric

MAY 2282

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Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	14 35 45	10♈41'52	1♈15	18♍ 3	23♊25	14♈ 0	2♈20	0°R43	19♊43	25°R24	21♈42	3♊22	4♊33	21♍ 5	9♊45	M 1
T 2	14 39 42	11°40'16	14° 0	19°37	24°32	14°45	2°29	0°341	19°46	25°22	21°43	3°R22	4°29	21°12	9°49	T 2
W 3	14 43 38	12°38'37	27° 9	21°14	25°38	15°29	2°38	0°39	19°49	25°21	21°43	3°22	4°26	21°18	9°53	W 3
T 4	14 47 35	13°36'57	10♈44	22°52	26°45	16°13	2°47	0°37	19°52	25°19	21°44	3°20	4°23	21°25	9°58	T 4
F 5	14 51 31	14°35'16	24°47	24°32	27°51	16°57	2°56	0°35	19°55	25°18	21°44	3°18	4°20	21°32	10° 2	F 5
S 6	14 55 28	15°33'33	9♍16	26°13	28°57	17°41	3° 4	0°32	19°58	25°16	21°45	3°16	4°17	21°38	10° 7	S 6
S 7	14 59 24	16°31'48	24° 7	27°57	0♈ 3	18°25	3°13	0°30	20° 1	25°14	21°45	3°13	4°14	21°45	10°11	S 7
M 8	15 3 21	17°30'02	9♈13	29°42	1° 8	19° 9	3°21	0°27	20° 4	25°13	21°46	3°12	4°10	21°52	10°16	M 8
T 9	15 7 17	18°28'15	24°26	1♈29	2°14	19°53	3°29	0°25	20° 7	25°12	21°46	3°11	4° 7	21°58	10°20	T 9
W10	15 11 14	19°26'25	9♊34	3°18	3°19	20°37	3°37	0°22	20°10	25°10	21°46	3°D11	4° 4	22° 5	10°25	W10
T11	15 15 11	20°24'34	24°30	5° 9	4°24	21°21	3°45	0°19	20°14	25° 9	21°47	3°11	4° 1	22°11	10°29	T11
F12	15 19 7	21°22'41	9♈ 7	7° 2	5°29	22° 4	3°53	0°16	20°17	25° 7	21°47	3°12	3°58	22°18	10°34	F12
S13	15 23 4	22°20'46	23°19	8°56	6°33	22°48	4° 1	0°13	20°20	25° 6	21°47	3°13	3°54	22°25	10°38	S13
S14	15 27 0	23°18'50	7♊ 6	10°52	7°37	23°32	4° 8	0°10	20°23	25° 4	21°48	3°14	3°51	22°31	10°43	S14
M15	15 30 57	24°16'51	20°28	12°50	8°41	24°15	4°16	0° 7	20°27	25° 3	21°48	3°R14	3°48	22°38	10°48	M15
T16	15 34 53	25°14'50	3♊26	14°50	9°45	24°59	4°23	0° 4	20°30	25° 2	21°48	3°14	3°45	22°45	10°52	T16
W17	15 38 50	26°12'48	16° 4	16°52	10°48	25°42	4°30	0° 1	20°33	25° 0	21°48	3°14	3°42	22°51	10°57	W17
T18	15 42 47	27°10'43	28°25	18°55	11°51	26°26	4°37	29♊57	20°36	24°59	21°48	3°13	3°39	22°58	11° 2	T18
F19	15 46 43	28° 8'37	10♈34	21° 0	12°54	27° 9	4°43	29°54	20°40	24°57	21°48	3°13	3°35	23° 5	11° 6	F19
S20	15 50 40	29° 6'29	22°33	23° 6	13°57	27°52	4°50	29°51	20°43	24°56	21°49	3°12	3°32	23°11	11°11	S20
S21	15 54 36	0♊ 4'20	4♊25	25°14	14°59	28°35	4°57	29°47	20°46	24°55	21°49	3°11	3°29	23°18	11°16	S21
M22	15 58 33	1° 2'09	16°14	27°23	16° 1	29°19	5° 3	29°44	20°50	24°54	21°49	3°11	3°26	23°25	11°21	M22
T23	16 2 29	1°59'56	28° 2	29°32	17° 3	0♊ 2	5° 9	29°40	20°53	24°52	21°R49	3°D11	3°23	23°31	11°25	T23
W24	16 6 26	2°57'43	9♊51	1♊43	18° 4	0°45	5°15	29°36	20°57	24°51	21°49	3°R11	3°20	23°38	11°30	W24
T25	16 10 22	3°55'27	21°43	3°54	19° 5	1°28	5°21	29°33	21° 0	24°50	21°49	3°11	3°16	23°45	11°35	T25
F26	16 14 19	4°53'11	3♈41	6° 6	20° 5	2°11	5°26	29°29	21° 4	24°49	21°49	3°11	3°13	23°51	11°40	F26
S27	16 18 16	5°50'54	15°48	8°17	21° 5	2°54	5°32	29°25	21° 7	24°48	21°48	3°11	3°10	23°58	11°44	S27
S28	16 22 12	6°48'35	28° 5	10°29	22° 5	3°37	5°37	29°21	21°10	24°47	21°48	3°10	3° 7	24° 4	11°49	S28
M29	16 26 9	7°46'15	10♈36	12°40	23° 5	4°20	5°42	29°17	21°14	24°45	21°48	3°10	3° 4	24°11	11°54	M29
T30	16 30 5	8°43'54	23°24	14°50	24° 4	5° 2	5°47	29°13	21°17	24°44	21°48	3°10	3° 0	24°18	11°59	T30
W31	16 34 2	9♊41'32	6♈31	16♊59	25°26	5♊45	5♈52	29♊ 9	21♊21	24°43	21°48	3°D 9	2♊57	24♊24	12♊ 4	W31

Delta T = 267.56 sec

JUNE 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	16 37 58	10♊39'09	20♈ 0	19♊ 7	26♈ 1	6♊28	5♈57	29°R 5	21♊24	24°R42	21°R48	3♊ 9	2♊54	24♊31	12♊ 9	T 1
F 2	16 41 55	11°36'46	3♍52	21°14	26°58	7°10	6° 1	29♊ 1	21°28	24°44	21°47	3°10	2°51	24°38	12°13	F 2
S 3	16 45 51	12°34'21	18° 8	23°18	27°56	7°53	6° 6	28°57	21°31	24°40	21°47	3°11	2°48	24°44	12°18	S 3
S 4	16 49 48	13°31'55	2♈45	25°21	28°53	8°36	6°10	28°53	21°35	24°39	21°47	3°11	2°45	24°51	12°23	S 4
M 5	16 53 45	14°29'29	17°39	27°22	29°49	9°18	6°14	28°49	21°38	24°38	21°46	3°12	2°41	24°58	12°28	M 5
T 6	16 57 41	15°27'02	2♊43	29°20	0♊45	10° 0	6°17	28°44	21°42	24°37	21°46	3°R12	2°38	25° 4	12°33	T 6
W 7	17 1 38	16°24'34	17°50	1♊16	1°41	10°43	6°21	28°40	21°46	24°37	21°46	3°12	2°35	25°11	12°37	W 7
T 8	17 5 34	17°22'05	2♈49	3°10	2°36	11°25	6°24	28°36	21°49	24°36	21°45	3°11	2°32	25°18	12°42	T 8
F 9	17 9 31	18°19'35	17°32	5° 2	3°30	12° 7	6°28	28°32	21°53	24°35	21°45	3° 9	2°29	25°24	12°47	F 9
S10	17 13 27	19°17'04	1♊54	6°50	4°24	12°50	6°31	28°27	21°56	24°34	21°44	3° 7	2°26	25°31	12°52	S10
S11	17 17 24	20°14'31	15°50	8°36	5°17	13°32	6°34	28°23	22° 0	24°33	21°44	3° 5	2°22	25°38	12°57	S11
M12	17 21 20	21°11'58	29°18	10°20	6°10	14°14	6°36	28°19	22° 3	24°33	21°43	3° 4	2°19	25°44	13° 2	M12
T13	17 25 17	22° 9'23	12♊21	12° 1	7° 2	14°56	6°39	28°14	22° 7	24°32	21°43	3° 3	2°16	25°51	13° 6	T13
W14	17 29 14	23° 6'47	25° 0	13°39	7°53	15°38	6°41	28°10	22°10	24°31	21°42	3°D 2	2°13	25°57	13°11	W14
T15	17 33 10	24° 4'10	7♊20	15°15	8°44	16°20	6°43	28° 5	22°14	24°30	21°42	3° 3	2°10	26° 4	13°16	T15
F16	17 37 7	25° 1'32	19°26	16°47	9°34	17° 2	6°45	28° 1	22°18	24°30	21°41	3° 4	2° 6	26°11	13°21	F16
S17	17 41 3	25°58'53	1♊20	18°17	10°23	17°44	6°47	27°57	22°21	24°29	21°41	3° 6	2° 3	26°17	13°25	S17
S18	17 45 0	26°56'13	13° 9	19°45	11°11	18°26	6°48	27°52	22°25	24°29	21°40	3° 7	2° 0	26°24	13°30	S18
M19	17 48 56	27°53'32	24°57	21° 9	11°59	19° 7	6°50	27°48	22°28	24°28	21°39	3° 8	1°57	26°31	13°35	M19
T20	17 52 53	28°50'50	6♊45	22°31	12°46	19°49	6°51	27°43	22°32	24°28	21°39	3°R 9	1°54	26°37	13°40	T20
W21	17 56 49	29°48'08	18°39	23°49	13°32	20°31	6°52	27°39	22°35	24°27	21°38	3° 8	1°51	26°44	13°44	W21
T22	18 0 46	0♈45'25	0♈39	25° 5	14°17	21°12	6°53	27°34	22°39	24°27	21°37	3° 5	1°47	26°51	13°49	T22
F23	18 4 43	1°42'42	12°48	26°18	15° 1	21°54	6°53	27°30	22°42	24°26	21°36	3° 2	1°44	26°57	13°54	F23
S24	18 8 39	2°39'58	25° 8	27°28	15°45	22°35	6°54	27°26	22°46	24°26	21°36	2°57	1°41	27° 4	13°58	S24
S25	18 12 36	3°37'13	7♊40	28°35	16°27	23°17	6°54	27°21	22°49	24°25	21°35	2°52	1°38	27°11	14° 3	S25
M26	18 16 32	4°34'28	20°24	29°38	17° 8	23°58	6°R54	27°17	22°53	24°25	21°34	2°47	1°35	27°17	14° 8	M26
T27	18 20 29	5°31'43	3♈22	0♊39	17°49	24°40	6°54	27°13	22°56	24°25	21°33	2°43	1°32	27°24	14°12	T27
W28	18 24 25	6°28'58	16°35	1°36	18°28	25°21	6°54	27° 8	23° 0	24°25	21°32	2°40	1°28	27°30	14°17	W28
T29	18 28 22	7°26'13	0♍ 4	2°29	19° 6	26° 2	6°53	27° 4	23° 3	24°24	21°32	2°39	1°25	27°37	14°21	T29
F30	18 32 18	8°23'27	13♍51	3♊20	19♊43	26♊44	6♈52	27♊ 0	23♊ 7	24°24	21°31	2°D38	1♊22	27♊44	14♊26	F30

Delta T = 267.69 sec

ASTRODIENST EPHEMERIS for the year 2282

geocentric

JULY 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	18 36 15	9 ⁵⁰ 20'42	27 ¹⁷ 54	4 ⁰ 6	20 ⁰ 18	27 ¹¹ 25	6 ⁰ R51	26 ⁰ R55	23 ¹¹ 10	24 ⁰ R24	21 ⁰ R30	2 ¹¹ 39	1 ¹¹ 19	27 ¹¹ 50	14 ¹¹ 30	S 1
S 2	18 40 12	10 ⁰ 17'56	12 ¹⁸ 15	4 ⁰ 49	20 ⁰ 53	28 ⁰ 6	6 ¹ 50	26 ⁰ 51	23 ⁰ 14	24 ⁰ 24	21 ⁰ 29	2 ⁰ 41	1 ⁰ 16	27 ⁰ 57	14 ⁰ 35	S 2
M 3	18 44 8	11 ⁰ 15'11	26 ⁰ 49	5 ⁰ 28	21 ⁰ 26	28 ⁰ 47	6 ⁰ 49	26 ⁰ 47	23 ⁰ 17	24 ⁰ 24	21 ⁰ 28	2 ⁰ R42	1 ⁰ 12	28 ⁰ 4	14 ⁰ 39	M 3
T 4	18 48 5	12 ⁰ 12'26	11 ⁰ 11'34	6 ⁰ 3	21 ⁰ 58	29 ⁰ 28	6 ⁰ 47	26 ⁰ 43	23 ⁰ 20	24 ⁰ 24	21 ⁰ 27	2 ⁰ 42	1 ⁰ 9	28 ⁰ 10	14 ⁰ 44	T 4
W 5	18 52 1	13 ⁰ 9'41	26 ⁰ 24	6 ⁰ 34	22 ⁰ 28	0 ⁰ 9	6 ⁰ 46	26 ⁰ 38	23 ⁰ 24	24 ⁰ 24	21 ⁰ 26	2 ⁰ 40	1 ⁰ 6	28 ⁰ 17	14 ⁰ 48	W 5
T 6	18 55 58	14 ⁰ 6'56	11 ⁰ 11	7 ⁰ 0	22 ⁰ 57	0 ⁰ 50	6 ⁰ 44	26 ⁰ 34	23 ⁰ 27	24 ⁰ D24	21 ⁰ 25	2 ⁰ 36	1 ⁰ 3	28 ⁰ 24	14 ⁰ 53	T 6
F 7	18 59 54	15 ⁰ 4'10	25 ⁰ 47	7 ⁰ 23	23 ⁰ 24	1 ⁰ 31	6 ⁰ 42	26 ⁰ 30	23 ⁰ 31	24 ⁰ 24	21 ⁰ 24	2 ⁰ 30	1 ⁰ 0	28 ⁰ 30	14 ⁰ 57	F 7
S 8	19 3 51	16 ⁰ 1'25	10 ⁰ 12	7 ⁰ 41	23 ⁰ 50	2 ⁰ 12	6 ⁰ 39	26 ⁰ 26	23 ⁰ 34	24 ⁰ 24	21 ⁰ 23	2 ⁰ 24	0 ⁰ 57	28 ⁰ 37	15 ⁰ 1	S 8
S 9	19 7 48	16 ⁰ 58'39	24 ⁰ 4	7 ⁰ 54	24 ⁰ 14	2 ⁰ 53	6 ⁰ 37	26 ⁰ 22	23 ⁰ 37	24 ⁰ 24	21 ⁰ 22	2 ⁰ 17	0 ⁰ 53	28 ⁰ 44	15 ⁰ 6	S 9
M10	19 11 44	17 ⁰ 55'53	7 ⁰ 11'35	8 ⁰ 3	24 ⁰ 36	3 ⁰ 33	6 ⁰ 34	26 ⁰ 18	23 ⁰ 41	24 ⁰ 24	21 ⁰ 21	2 ⁰ 11	0 ⁰ 50	28 ⁰ 50	15 ⁰ 10	M10
T 11	19 15 41	18 ⁰ 53'06	20 ⁰ 41	8 ⁰ R 7	24 ⁰ 57	4 ⁰ 14	6 ⁰ 31	26 ⁰ 14	23 ⁰ 44	24 ⁰ 24	21 ⁰ 20	2 ⁰ 6	0 ⁰ 47	28 ⁰ 57	15 ⁰ 14	T 11
W12	19 19 37	19 ⁰ 50'20	3 ⁰ 23	8 ⁰ 6	25 ⁰ 16	4 ⁰ 55	6 ⁰ 28	26 ⁰ 10	23 ⁰ 47	24 ⁰ 24	21 ⁰ 19	2 ⁰ 2	0 ⁰ 44	29 ⁰ 4	15 ⁰ 19	W12
T 13	19 23 34	20 ⁰ 47'33	15 ⁰ 44	8 ⁰ 1	25 ⁰ 33	5 ⁰ 35	6 ⁰ 25	26 ⁰ 7	23 ⁰ 51	24 ⁰ 24	21 ⁰ 17	2 ⁰ D 1	0 ⁰ 41	29 ⁰ 10	15 ⁰ 23	T 13
F 14	19 27 30	21 ⁰ 44'46	27 ⁰ 49	7 ⁰ 51	25 ⁰ 48	6 ⁰ 16	6 ⁰ 22	26 ⁰ 3	23 ⁰ 54	24 ⁰ 25	21 ⁰ 16	2 ⁰ 1	0 ⁰ 38	29 ⁰ 17	15 ⁰ 27	F 14
S 15	19 31 27	22 ⁰ 41'59	9 ⁰ 11'43	7 ⁰ 37	26 ⁰ 1	6 ⁰ 56	6 ⁰ 18	25 ⁰ 59	23 ⁰ 57	24 ⁰ 25	21 ⁰ 15	2 ⁰ 2	0 ⁰ 34	29 ⁰ 23	15 ⁰ 31	S 15
S 16	19 35 23	23 ⁰ 39'12	21 ⁰ 32	7 ⁰ 18	26 ⁰ 12	7 ⁰ 37	6 ⁰ 14	25 ⁰ 55	24 ⁰ 0	24 ⁰ 25	21 ⁰ 14	2 ⁰ 3	0 ⁰ 31	29 ⁰ 30	15 ⁰ 35	S 16
M17	19 39 20	24 ⁰ 36'25	3 ⁰ 20	6 ⁰ 54	26 ⁰ 21	8 ⁰ 17	6 ⁰ 11	25 ⁰ 52	24 ⁰ 3	24 ⁰ 26	21 ⁰ 13	2 ⁰ R 3	0 ⁰ 28	29 ⁰ 37	15 ⁰ 39	M17
T 18	19 43 17	25 ⁰ 33'38	15 ⁰ 12	6 ⁰ 27	26 ⁰ 27	8 ⁰ 58	6 ⁰ 6	25 ⁰ 48	24 ⁰ 7	24 ⁰ 26	21 ⁰ 12	2 ⁰ 2	0 ⁰ 25	29 ⁰ 43	15 ⁰ 43	T 18
W19	19 47 13	26 ⁰ 30'51	27 ⁰ 11	5 ⁰ 57	26 ⁰ 32	9 ⁰ 38	6 ⁰ 2	25 ⁰ 45	24 ⁰ 10	24 ⁰ 26	21 ⁰ 11	1 ⁰ 59	0 ⁰ 22	29 ⁰ 50	15 ⁰ 47	W19
T 20	19 51 10	27 ⁰ 28'04	9 ⁰ 31	5 ⁰ 23	26 ⁰ R34	10 ⁰ 18	5 ⁰ 58	25 ⁰ 41	24 ⁰ 13	24 ⁰ 27	21 ⁰ 9	1 ⁰ 54	0 ⁰ 18	29 ⁰ 57	15 ⁰ 51	T 20
F 21	19 55 6	28 ⁰ 25'18	21 ⁰ 44	4 ⁰ 47	26 ⁰ 34	10 ⁰ 59	5 ⁰ 53	25 ⁰ 38	24 ⁰ 16	24 ⁰ 27	21 ⁰ 8	1 ⁰ 47	0 ⁰ 15	0 ⁰ 27 3	15 ⁰ 55	F 21
S 22	19 59 3	29 ⁰ 22'31	4 ⁰ 20	4 ⁰ 8	26 ⁰ 31	11 ⁰ 39	5 ⁰ 48	25 ⁰ 35	24 ⁰ 19	24 ⁰ 28	21 ⁰ 7	1 ⁰ 38	0 ⁰ 12	0 ⁰ 10	15 ⁰ 59	S 22
S 23	20 2 59	0 ⁰ 19'46	17 ⁰ 11	3 ⁰ 28	26 ⁰ 26	12 ⁰ 19	5 ⁰ 44	25 ⁰ 31	24 ⁰ 22	24 ⁰ 28	21 ⁰ 6	1 ⁰ 27	0 ⁰ 9	0 ⁰ 17	16 ⁰ 3	S 23
M24	20 6 56	1 ⁰ 17'00	0 ⁰ 15	2 ⁰ 47	26 ⁰ 19	12 ⁰ 59	5 ⁰ 38	25 ⁰ 28	24 ⁰ 25	24 ⁰ 29	21 ⁰ 4	1 ⁰ 18	0 ⁰ 6	0 ⁰ 23	16 ⁰ 7	M24
T 25	20 10 52	2 ⁰ 14'15	13 ⁰ 32	2 ⁰ 6	26 ⁰ 9	13 ⁰ 39	5 ⁰ 33	25 ⁰ 25	24 ⁰ 28	24 ⁰ 30	21 ⁰ 3	1 ⁰ 9	0 ⁰ 3	0 ⁰ 30	16 ⁰ 11	T 25
W26	20 14 49	3 ⁰ 11'31	27 ⁰ 1	1 ⁰ 26	25 ⁰ 57	14 ⁰ 19	5 ⁰ 28	25 ⁰ 22	24 ⁰ 31	24 ⁰ 30	21 ⁰ 2	1 ⁰ 2	29 ⁰ 59	0 ⁰ 37	16 ⁰ 14	W26
T 27	20 18 46	4 ⁰ 8'48	10 ⁰ 40	0 ⁰ 47	25 ⁰ 43	14 ⁰ 59	5 ⁰ 22	25 ⁰ 19	24 ⁰ 34	24 ⁰ 31	21 ⁰ 1	0 ⁰ 57	29 ⁰ 56	0 ⁰ 43	16 ⁰ 18	T 27
F 28	20 22 42	5 ⁰ 6'05	24 ⁰ 30	0 ⁰ 10	25 ⁰ 26	15 ⁰ 39	5 ⁰ 17	25 ⁰ 16	24 ⁰ 37	24 ⁰ 32	20 ⁰ 59	0 ⁰ 55	29 ⁰ 53	0 ⁰ 50	16 ⁰ 22	F 28
S 29	20 26 39	6 ⁰ 3'23	8 ⁰ 29	29 ⁰ 35	25 ⁰ 7	16 ⁰ 19	5 ⁰ 11	25 ⁰ 13	24 ⁰ 40	24 ⁰ 32	20 ⁰ 58	0 ⁰ D55	29 ⁰ 50	0 ⁰ 56	16 ⁰ 25	S 29
S 30	20 30 35	7 ⁰ 0'43	22 ⁰ 37	29 ⁰ 4	24 ⁰ 46	16 ⁰ 59	5 ⁰ 5	25 ⁰ 11	24 ⁰ 43	24 ⁰ 33	20 ⁰ 57	0 ⁰ 55	29 ⁰ 47	1 ⁰ 3	16 ⁰ 29	S 30
M31	20 34 32	7 ⁰ 15'58'03	6 ⁰ 11'54	28 ⁰ 37	24 ⁰ 12'3	17 ⁰ 39	4 ⁰ 59	25 ⁰ 8	24 ⁰ 45	24 ⁰ 34	20 ⁰ 55	0 ⁰ R55	29 ⁰ 44	1 ⁰ 10	16 ⁰ 32	M31

Delta T = 267.82 sec

AUGUST 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	20 38 28	8♂55°24	21♂17	28°R15	23°R57	18♂18	4°R53	25°R 5	24♂48	24♂35	20°R54	0°R54	29♂40	1♂16	16♂36	T 1
W 2	20 42 25	9°52'46	5♂43	27♂58	23♂30	18°58	4♂46	25♂ 3	24°51	24°35	20♂53	0♂50	29°37	1°23	16°39	W 2
T 3	20 46 21	10°50'09	20° 7	27°45	23° 1	19°38	4°40	25° 1	24°54	24°36	20°51	0°43	29°34	1°30	16°42	T 3
F 4	20 50 18	11°47'33	4♂25	27°39	22°30	20°18	4°33	24°58	24°56	24°37	20°50	0°34	29°31	1°36	16°46	F 4
S 5	20 54 15	12°44'58	18°29	27°D39	21°57	20°57	4°27	24°56	24°59	24°38	20°49	0°24	29°28	1°43	16°49	S 5
S 6	20 58 11	13°42'23	2♂16	27°44	21°23	21°37	4°20	24°54	25° 2	24°39	20°47	0°12	29°24	1°50	16°52	S 6
M 7	21 2 8	14°39'50	15°41	27°57	20°49	22°16	4°13	24°52	25° 4	24°40	20°46	0° 2	29°21	1°56	16°55	M 7
T 8	21 6 4	15°37'16	28°44	28°15	20°13	22°56	4° 6	24°50	25° 7	24°41	20°45	29♂52	29°18	2° 3	16°59	T 8
W 9	21 10 1	16°34'44	11♂24	28°40	19°36	23°35	3°59	24°48	25° 9	24°42	20°43	29°46	29°15	2°10	17° 2	W 9
T 10	21 13 57	17°32'12	23°45	29°11	18°59	24°14	3°52	24°46	25°12	24°43	20°42	29°41	29°12	2°16	17° 5	T 10
F 11	21 17 54	18°29'41	5♂50	29°49	18°22	24°54	3°44	24°44	25°14	24°44	20°41	29°39	29° 9	2°23	17° 8	F 11
S 12	21 21 50	19°27'11	17°45	0♂34	17°44	25°33	3°37	24°42	25°17	24°46	20°39	29°D39	29° 5	2°30	17°11	S 12
S 13	21 25 47	20°24'42	29°34	1°25	17° 7	26°12	3°29	24°41	25°19	24°47	20°38	29°R39	29° 2	2°36	17°13	S 13
M14	21 29 44	21°22'13	11♂23	2°22	16°30	26°52	3°22	24°39	25°21	24°48	20°37	29°R38	28°59	2°43	17°16	M14
T 15	21 33 40	22°19'45	23°17	3°25	15°54	27°31	3°14	24°38	25°24	24°49	20°35	29°36	28°56	2°49	17°19	T 15
W16	21 37 37	23°17'18	5♂21	4°34	15°19	28°10	3° 7	24°37	25°26	24°50	20°34	29°32	28°53	2°56	17°22	W16
T 17	21 41 33	24°14'52	17°40	5°48	14°45	28°49	2°59	24°36	25°28	24°52	20°33	29°26	28°50	3° 3	17°24	T 17
F 18	21 45 30	25°12'27	0♂14	7° 9	14°13	29°28	2°51	24°35	25°30	24°53	20°31	29°16	28°46	3° 9	17°27	F 18
S 19	21 49 26	26°10'03	13° 7	8°34	13°41	0♂ 7	2°44	24°34	25°32	24°54	20°30	29° 5	28°43	3°16	17°29	S 19
S 20	21 53 23	27° 5'19	26°18	10° 4	13°12	0°46	2°36	24°33	25°35	24°56	20°29	28°53	28°40	3°23	17°32	S 20
M21	21 57 19	28° 7'41	9♂45	11°39	12°44	1°25	2°28	24°32	25°37	24°57	20°27	28°40	28°37	3°29	17°34	M21
T 22	22 1 16	29° 2'59	23°26	13°18	12°19	2° 4	2°20	24°31	25°39	24°58	20°26	28°29	28°34	3°36	17°36	T 22
W23	22 5 13	0♂ 0'40	7♂18	15° 1	11°55	2°42	2°12	24°30	25°41	25° 0	20°25	28°20	28°30	3°43	17°39	W23
T 24	22 9 9	0°58'22	21°17	16°47	11°34	3°21	2° 5	24°30	25°43	25° 1	20°23	28°14	28°27	3°49	17°41	T 24
F 25	22 13 6	1°56'06	5♂20	18°37	11°15	4° 0	1°57	24°29	25°44	25° 3	20°22	28°11	28°24	3°56	17°43	F 25
S 26	22 17 2	2°53'52	19°26	20°29	10°58	4°39	1°49	24°29	25°46	25° 4	20°21	28°10	28°21	4° 3	17°45	S 26
S 27	22 20 59	3°51'40	3♂33	22°23	10°44	5°17	1°41	24°29	25°48	25° 6	20°19	28°10	28°18	4° 9	17°47	S 27
M28	22 24 55	4°49'29	17°40	24°18	10°32	5°56	1°33	24°29	25°50	25° 7	20°18	28°10	28°15	4°16	17°49	M28
T 29	22 28 52	5°47'20	1♂46	26°15	10°22	6°35	1°25	24°D29	25°52	25° 9	20°17	28° 8	28°11	4°22	17°51	T 29
W30	22 32 48	6°45'13	15°50	28°14	10°15	7°13	1°17	24°29	25°53	25°11	20°15	28° 4	28° 8	4°29	17°53	W30
T 31	22 36 45	7♂43'08	29♂49	0♂12	10♂10	7♂52	1♂10	24♂29	25♂55	25♂12	20♂14	27♂57	28♂ 5	4♂36	17♂55	T 31

ASTRODIENST EPHEMERIS for the year 2282

geocentric

SEPTEMBER 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	22 40 42	8 ^h 41'04"	13 ^h 41'	2 ^h 11'	10°D 8	8 ^h 30'	1°R 2	24 ^h 29'	25 ^h 56'	25 ^h 14'	20°R13	27°R47	28 ^h 2'	4 ^h 42'	17 ^h 56'	F 1
S 2	22 44 38	9°39'02"	27°22'	4°10'	10 ^h 8'	9° 9	0 ^h 54'	24°29'	25°58'	25°16'	20°R12	27°R36	27°59'	4°49'	17°58'	S 2
S 3	22 48 35	10°37'01"	10 ^h 49'	6° 9	10°11'	9°47'	0°46'	24°30'	26° 0	25°17'	20°10'	27°23'	27°56'	4°56'	18° 0	S 3
M 4	22 52 31	11°35'02"	23°59'	8° 8	10°15'	10°25'	0°39'	24°30'	26° 1	25°19'	20° 9	27°12'	27°52'	5° 2	18° 1	M 4
T 5	22 56 28	12°33'04"	6 ^h 51'	10° 6	10°22'	11° 4	0°31'	24°31'	26° 2	25°21'	20° 8	27° 2	27°49'	5° 9	18° 3	T 5
W 6	23 0 24	13°31'08"	19°25'	12° 3	10°31'	11°42'	0°24'	24°32'	26° 4	25°22'	20° 7	26°54'	27°46'	5°16'	18° 4	W 6
T 7	23 4 21	14°29'14"	1 ^h 41'	14° 0	10°42'	12°20'	0°16'	24°33'	26° 5	25°24'	20° 6	26°49'	27°43'	5°22'	18° 5	T 7
F 8	23 8 17	15°27'20"	13°45'	15°55'	10°55'	12°58'	0° 9	24°34'	26° 6	25°26'	20° 4	26°46'	27°40'	5°29'	18° 6	F 8
S 9	23 12 14	16°25'29"	25°38'	17°50'	11°10'	13°37'	0° 2	24°35'	26° 7	25°28'	20° 3	26°D45	27°36'	5°36'	18° 8	S 9
S 10	23 16 11	17°23'39"	7 ^h 27'	19°43'	11°28'	14°15'	29°55'	24°36'	26° 9	25°30'	20° 2	26°45'	27°33'	5°42'	18° 9	S 10
M 11	23 20 7	18°21'50"	19°15'	21°36'	11°47'	14°53'	29°47'	24°37'	26°10'	25°31'	20° 1	26°R46	27°30'	5°49'	18°10	M 11
T 12	23 24 4	19°20'03"	1 ^h 31'	23°27'	12° 8	15°31'	29°40'	24°38'	26°11'	25°33'	20° 0	26°45'	27°27'	5°56'	18°11	T 12
W 13	23 28 0	20°18'17"	13°16'	25°17'	12°30'	16° 9	29°34'	24°40'	26°12'	25°35'	19°59'	26°42'	27°24'	6° 2	18°12	W 13
T 14	23 31 57	21°16'33"	25°38'	27° 6	12°55'	16°47'	29°27'	24°41'	26°13'	25°37'	19°57'	26°38'	27°21'	6° 9	18°12	T 14
F 15	23 35 53	22°14'50"	8 ^h 19'	28°54'	13°21'	17°25'	29°20'	24°43'	26°14'	25°39'	19°56'	26°30'	27°17'	6°15'	18°13	F 15
S 16	23 39 50	23°13'09"	21°22'	0 ^h 41'	13°48'	18° 2	29°13'	24°44'	26°14'	25°41'	19°55'	26°21'	27°14'	6°22'	18°14	S 16
S 17	23 43 46	24°11'29"	4 ^h 48'	2°26'	14°17'	18°40'	29° 7	24°46'	26°15'	25°43'	19°54'	26°11'	27°11'	6°29'	18°14	S 17
M 18	23 47 43	25° 9'51"	18°35'	4°11'	14°48'	19°18'	29° 1	24°48'	26°16'	25°45'	19°53'	26° 1	27° 8	6°35'	18°15	M 18
T 19	23 51 39	26° 8'15"	2 ^h 39'	5°54'	15°20'	19°56'	28°54'	24°50'	26°17'	25°47'	19°52'	25°52'	27° 5	6°42'	18°15	T 19
W 20	23 55 36	27° 6'41"	16°57'	7°37'	15°54'	20°33'	28°48'	24°52'	26°17'	25°49'	19°51'	25°45'	27° 1	6°49'	18°16	W 20
T 21	23 59 33	28° 5'09"	1 ^h 21'	9°18'	16°29'	21°11'	28°42'	24°54'	26°18'	25°51'	19°50'	25°40'	26°58'	6°55'	18°16	T 21
F 22	0 3 29	29° 3'39"	15°47'	10°58'	17° 5	21°49'	28°37'	24°56'	26°18'	25°53'	19°49'	25°38'	26°55'	7° 2	18°16	F 22
S 23	0 7 26	0 ^h 21'	0 ^h 11'	12°37'	17°43'	22°26'	28°31'	24°59'	26°19'	25°55'	19°48'	25°D37	26°52'	7° 9	18°17	S 23
S 24	0 11 22	1° 0'45"	14°28'	14°15'	18°21'	23° 4	28°26'	25° 1	26°19'	25°57'	19°47'	25°38'	26°49'	7°15'	18°17	S 24
M 25	0 15 19	1°59'22"	28°37'	15°52'	19° 1	23°41'	28°20'	25° 4	26°20'	25°59'	19°46'	25°R39	26°46'	7°22'	18°17	M 25
T 26	0 19 15	2°58'00"	12°37'	17°29'	19°42'	24°19'	28°15'	25° 6	26°20'	26° 1	19°45'	25°39'	26°42'	7°29'	18°17	T 26
W 27	0 23 12	3°56'41"	26°27'	19° 4	20°24'	24°56'	28°10'	25° 9	26°20'	26° 3	19°44'	25°36'	26°39'	7°35'	18°17	W 27
T 28	0 27 8	4°55'25"	10 ^h 7'	20°38'	21° 7	25°33'	28° 5	25°12'	26°21'	26° 5	19°44'	25°32'	26°36'	7°42'	18°16	T 28
F 29	0 31 5	5°54'10"	23°35'	22°11'	21°52'	26°11'	28° 0	25°15'	26°21'	26° 8	19°43'	25°26'	26°33'	7°49'	18°16	F 29
S 30	0 35 2	6 ^h 52'57"	6 ^h 51'	23 ^h 43'	22 ^h 37'	26 ^h 48'	27 ^h 56'	25 ^h 18'	26 ^h 21'	26 ^h 10'	19 ^h 42'	25 ^h 18'	26 ^h 30'	7 ^h 55'	18 ^h 16	S 30

Delta T = 268.10 sec

OCTOBER 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	0 38 58	7 ^h 51'47"	19 ^h 55'	25 ^h 15'	23 ^h 23'	27 ^h 25'	27°R51	25 ^h 21'	26 ^h 21'	26 ^h 12'	19°R41	25°R 9	26 ^h 27'	8 ^h 2'	18°R15	S 1
M 2	0 42 55	8°50'38"	2 ^h 44'	26°45'	24°10'	28° 2	27°R47	25°24'	26°R21	26°14'	19°R40	25°R 1	26°23'	8° 8	18°R15	M 2
T 3	0 46 51	9°49'32"	15°20'	28°15'	24°57'	28°39'	27°43'	25°27'	26°21'	26°16'	19°39'	24°54'	26°20'	8°15'	18°14	T 3
W 4	0 50 48	10°48'28"	27°41'	29°43'	25°46'	29°17'	27°39'	25°30'	26°21'	26°18'	19°39'	24°48'	26°17'	8°22'	18°14	W 4
T 5	0 54 44	11°47'25"	9 ^h 50'	1 ^h 11'	26°35'	29°54'	27°36'	25°34'	26°21'	26°20'	19°38'	24°45'	26°14'	8°28'	18°13	T 5
F 6	0 58 41	12°46'25"	21°49'	2°37'	27°26'	0 ^h 31'	27°32'	25°37'	26°21'	26°23'	19°37'	24°D44	26°11'	8°35'	18°12	F 6
S 7	1 2 37	13°45'26"	3 ^h 39'	4° 3	28°16'	1° 8	27°29'	25°41'	26°20'	26°25'	19°37'	24°44'	26° 7	8°42'	18°11	S 7
S 8	1 6 34	14°44'29"	15°27'	5°28'	29° 8	1°44'	27°26'	25°45'	26°20'	26°27'	19°36'	24°46'	26° 4	8°48'	18°11	S 8
M 9	1 10 31	15°43'34"	27°15'	6°51'	0 ^h 0	2°21'	27°23'	25°48'	26°20'	26°29'	19°35'	24°47'	26° 1	8°55'	18°10	M 9
T 10	1 14 27	16°42'41"	9 ^h 38'	8°14'	0°53'	2°58'	27°20'	25°52'	26°19'	26°31'	19°35'	24°48'	25°58'	9° 2	18° 9	T 10
W 11	1 18 24	17°41'49"	21°13'	9°36'	1°47'	3°35'	27°18'	25°56'	26°19'	26°34'	19°34'	24°R49	25°55'	9° 8	18° 7	W 11
T 12	1 22 20	18°41'00"	3 ^h 33'	10°56'	2°41'	4°12'	27°15'	26° 0	26°18'	26°36'	19°34'	24°47'	25°52'	9°15'	18° 6	T 12
F 13	1 26 17	19°40'12"	16°13'	12°15'	3°36'	4°48'	27°13'	26° 4	26°18'	26°38'	19°33'	24°45'	25°48'	9°22'	18° 5	F 13
S 14	1 30 13	20°39'25"	29°18'	13°33'	4°32'	5°25'	27°11'	26° 8	26°17'	26°40'	19°32'	24°41'	25°45'	9°28'	18° 4	S 14
S 15	1 34 10	21°38'41"	12 ^h 48'	14°50'	5°28'	6° 2	27° 9	26°12'	26°17'	26°43'	19°32'	24°36'	25°42'	9°35'	18° 2	S 15
M 16	1 38 6	22°37'58"	26°44'	16° 5	6°24'	6°38'	27° 8	26°17'	26°16'	26°45'	19°32'	24°31'	25°39'	9°42'	18° 1	M 16
T 17	1 42 3	23°37'17"	11 ^h 3'	17°19'	7°21'	7°15'	27° 7	26°21'	26°15'	26°47'	19°31'	24°26'	25°36'	9°48'	17°59	T 17
W 18	1 46 0	24°36'38"	25°40'	18°31'	8°19'	7°51'	27° 5	26°25'	26°14'	26°49'	19°31'	24°23'	25°32'	9°55'	17°58	W 18
T 19	1 49 56	25°36'01"	10 ^h 28'	19°42'	9°17'	8°27'	27° 4	26°30'	26°14'	26°51'	19°30'	24°20'	25°29'	10° 1	17°56	T 19
F 20	1 53 53	26°35'27"	25°20'	20°50'	10°16'	9° 4	27° 4	26°35'	26°13'	26°54'	19°30'	24°D20	25°26'	10° 8	17°54	F 20
S 21	1 57 49	27°34'54"	10 ^h 11'	21°57'	11°15'	9°40'	27° 3	26°39'	26°12'	26°56'	19°30'	24°20'	25°23'	10°15'	17°53	S 21
S 22	2 1 46	28°34'24"	24°46'	23° 1	12°14'	10°16'	27° 3	26°44'	26°11'	26°58'	19°29'	24°22'	25°20'	10°21'	17°51	S 22
M 23	2 5 42	29°33'57"	9 ^h 28'	24° 4	13°15'	10°52'	27°D 3	26°49'	26°10'	27° 0	19°29'	24°23'	25°17'	10°28'	17°49	M 23
T 24	2 9 39	0 ^h 33'31"	23°15'	25° 3	14°15'	11°29'	27° 3	26°54'	26° 9	27° 3	19°29'	24°24'	25°13'	10°35'	17°47	T 24
W 25	2 13 35	1°33'08"	7 ^h 3'	26° 0	15°16'	12° 5	27° 3	26°58'	26° 7	27° 5	19°28'	24°R24	25°10'	10°41'	17°45	W 25
T 26	2 17 32	2°32'47"	20°33'	26°53'	16°17'	12°41'	27° 3	27° 3	26° 6	27° 7	19°28'	24°23'	25° 7	10°48'	17°43	T 26
F 27	2 21 29	3°32'28"	3 ^h 45'	27°43'	17°19'	13°17'	27° 4	27° 8	26° 5	27° 9	19°28'	24°21'	25° 4	10°55'	17°41	F 27
S 28	2 25 25	4°32'11"	16°42'	28°29'	18°21'	13°53'	27° 5	27°14'	26° 4	27°12'	19°28'	24°19'	25° 1	11° 1	17°38	S 28
S 29	2 29 22	5°31'57"	29°25'	29°10'	19°23'	14°29'	27° 6	27°19'	26° 2	27°14'	19°28'	24°16'	24°58'	11° 8	17°36	S 29
M 30	2 33 18	6°31'45"	11 ^h 54'	29°47'	20°26'	15° 4	27° 7	27°24'	26° 1	27°16'	19°28'	24°13'	24°54'	11°15'	17°34	M 30
T 31	2 37 15	7 ^h 31'34"	24 ^h 13'	0 ^h 19'	21 ^h 29'	15 ^h 40'	27 ^h 59'	27 ^h 29'	26 ^h 11'	27 ^h 18'	19 ^h 28'	24 ^h 10'	24 ^h 51'	11 ^h 21'	17 ^h 31	T 31

Delta T = 268.23 sec

ASTRODIENST EPHEMERIS for the year 2282
geocentric

NOVEMBER 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	2 41 11	8♉31'26	6♉21	0♈45	22♏33	16♏16	27♏10	27♏35	25°R58	27♏20	19°R28	24°R 9	24♏48	11♏28	17°R29	W 1
T 2	2 45 8	9°31'20	18°20	1° 4	23°36	16°52	27°12	27°40	25°II57	27°23	19°D28	24°D 8	24°45	11°35	17°II26	T 2
F 3	2 49 4	10°31'16	0♈13	1°17	24°41	17°27	27°14	27°46	25°55	27°25	19°≈28	24♏8	24°42	11°41	17°24	F 3
S 4	2 53 1	11°31'13	12° 1	1°R22	25°45	18° 3	27°17	27°51	25°54	27°27	19°28	24° 9	24°38	11°48	17°21	S 4
S 5	2 56 58	12°31'13	23°48	1°18	26°50	18°38	27°19	27°57	25°52	27°29	19°28	24°10	24°35	11°55	17°19	S 5
M 6	3 0 54	13°31'14	5♈36	1° 6	27°55	19°14	27°22	28° 2	25°50	27°31	19°28	24°11	24°32	12° 1	17°16	M 6
T 7	3 4 51	14°31'16	17°30	0°45	29° 0	19°49	27°25	28° 8	25°49	27°34	19°28	24°12	24°29	12° 8	17°13	T 7
W 8	3 8 47	15°31'21	29°33	0°14	0♉5	20°24	27°28	28°14	25°47	27°36	19°28	24°13	24°26	12°14	17°10	W 8
T 9	3 12 44	16°31'26	11≈50	29♉33	1°11	20°59	27°31	28°20	25°45	27°38	19°28	24°R13	24°23	12°21	17° 7	T 9
F 10	3 16 40	17°31'34	24°26	28°43	2°17	21°35	27°34	28°26	25°43	27°40	19°28	24°13	24°19	12°28	17° 4	F 10
S 11	3 20 37	18°31'43	7♏24	27°44	3°24	22°10	27°38	28°32	25°41	27°42	19°29	24°13	24°16	12°34	17° 2	S 11
S 12	3 24 33	19°31'53	20°48	26°38	4°30	22°45	27°42	28°38	25°39	27°44	19°29	24°12	24°13	12°41	16°59	S 12
M13	3 28 30	20°32'05	4♏40	25°25	5°37	23°20	27°46	28°44	25°38	27°46	19°29	24°12	24°10	12°48	16°56	M13
T 14	3 32 27	21°32'18	18°58	24° 7	6°44	23°55	27°50	28°50	25°36	27°48	19°29	24°11	24° 7	12°54	16°52	T 14
W15	3 36 23	22°32'33	3♏40	22°47	7°51	24°30	27°54	28°56	25°34	27°51	19°30	24°11	24° 4	13° 1	16°49	W15
T 16	3 40 20	23°32'50	18°40	21°28	8°59	25° 4	27°59	29° 2	25°32	27°53	19°30	24°11	24° 0	13° 8	16°46	T 16
F 17	3 44 16	24°33'08	3♉49	20°12	10° 6	25°39	28° 3	29° 8	25°29	27°55	19°31	24°11	23°57	13°14	16°43	F 17
S 18	3 48 13	25°33'28	18°59	19° 1	11°14	26°14	28° 8	29°14	25°27	27°57	19°31	24°11	23°54	13°21	16°40	S 18
S 19	3 52 9	26°33'50	3♊59	17°57	12°22	26°48	28°13	29°21	25°25	27°59	19°31	24°11	23°51	13°28	16°37	S 19
M20	3 56 6	27°34'14	18°43	17° 3	13°31	27°23	28°19	29°27	25°23	28° 1	19°32	24°10	23°48	13°34	16°33	M20
T 21	4 0 2	28°34'40	3♊5	16°20	14°39	27°57	28°24	29°33	25°21	28° 3	19°32	24°10	23°44	13°41	16°30	T 21
W22	4 3 59	29°35'07	17° 2	15°48	15°48	28°32	28°30	29°40	25°19	28° 5	19°33	24°10	23°41	13°48	16°27	W22
T 23	4 7 56	0♈35'36	0♏33	15°28	16°57	29° 6	28°36	29°46	25°16	28° 7	19°34	24°D10	23°38	13°54	16°23	T 23
F 24	4 11 52	1°36'07	13°42	15°D19	18° 6	29°40	28°42	29°53	25°14	28° 9	19°34	24°10	23°35	14° 1	16°20	F 24
S 25	4 15 49	2°36'40	26°29	15°22	19°15	0♉14	28°48	29°59	25°12	28°11	19°35	24°10	23°32	14° 8	16°17	S 25
S 26	4 19 45	3°37'15	8♉58	15°35	20°24	0°48	28°54	0♊6	25°10	28°12	19°35	24°11	23°29	14°14	16°13	S 26
M27	4 23 42	4°37'51	21°14	15°58	21°34	1°22	29° 0	0°12	25° 7	28°14	19°36	24°12	23°25	14°21	16°10	M27
T 28	4 27 38	5°38'29	3♉18	16°30	22°44	1°56	29° 7	0°19	25° 5	28°16	19°37	24°13	23°22	14°28	16° 6	T 28
W29	4 31 35	6°39'08	15°15	17° 9	23°54	2°30	29°14	0°26	25° 3	28°18	19°37	24°14	23°19	14°34	16° 3	W29
T 30	4 35 31	7♈39'49	27♉6	17♉56	25♉4	3♉4	29°≈21	0♊32	25°II 0	28♉20	19°≈38	24°R14	23♉16	14°≈41	15°II59	T 30

Delta T = 268.36 sec

DECEMBER 2282

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	4 39 28	8♈40'32	8♈55	18♉49	26♉14	3♉38	29°≈28	0♊39	24°R58	28♉22	19°≈39	24°R14	23♉13	14°≈48	15°R56	F 1
S 2	4 43 25	9°41'15	20°43	19°47	27°24	4°11	29°35	0°46	24°II55	28°24	19°40	24♉12	23°10	14°54	15°II52	S 2
S 3	4 47 21	10°42'00	2♊31	20°51	28°35	4°45	29°43	0°53	24°53	28°25	19°40	24°10	23° 6	15° 1	15°49	S 3
M 4	4 51 18	11°42'47	14°24	21°58	29°45	5°18	29°50	1° 0	24°50	28°27	19°41	24° 7	23° 3	15° 7	15°45	M 4
T 5	4 55 14	12°43'34	26°22	23° 9	0♉56	5°51	29°58	1° 6	24°48	28°29	19°42	24° 4	23° 0	15°14	15°41	T 5
W 6	4 59 11	13°44'22	8≈28	24°23	2° 7	6°25	0♏6	1°13	24°45	28°31	19°43	24° 1	22°57	15°21	15°38	W 6
T 7	5 3 7	14°45'12	20°47	25°39	3°18	6°58	0°14	1°20	24°43	28°32	19°44	23°59	22°54	15°27	15°34	T 7
F 8	5 7 4	15°46'02	3♏20	26°58	4°29	7°31	0°22	1°27	24°40	28°34	19°45	23°57	22°50	15°34	15°31	F 8
S 9	5 11 0	16°46'53	16°12	28°19	5°40	8° 4	0°31	1°34	24°38	28°36	19°46	23°D56	22°47	15°41	15°27	S 9
S 10	5 14 57	17°47'45	29°26	29°42	6°51	8°36	0°39	1°41	24°35	28°37	19°47	23°57	22°44	15°47	15°24	S 10
M11	5 18 54	18°48'37	13♏5	1♈5	8° 2	9° 9	0°48	1°48	24°33	28°39	19°48	23°58	22°41	15°54	15°20	M11
T 12	5 22 50	19°49'30	27°10	2°31	9°14	9°42	0°56	1°55	24°30	28°40	19°49	24° 0	22°38	16° 1	15°16	T 12
W13	5 26 47	20°50'24	11♉40	3°57	10°26	10°14	1° 5	2° 2	24°28	28°42	19°50	24° 1	22°35	16° 7	15°13	W13
T 14	5 30 43	21°51'19	26°33	5°24	11°37	10°47	1°14	2° 9	24°25	28°43	19°51	24°R 1	22°31	16°14	15° 9	T 14
F 15	5 34 40	22°52'15	11♉42	6°51	12°49	11°19	1°24	2°16	24°23	28°45	19°52	24° 0	22°28	16°21	15° 6	F 15
S 16	5 38 36	23°53'12	26°58	8°20	14° 1	11°51	1°33	2°23	24°20	28°46	19°53	23°58	22°25	16°27	15° 2	S 16
S 17	5 42 33	24°54'09	12♊11	9°49	15°13	12°23	1°42	2°30	24°18	28°48	19°54	23°54	22°22	16°34	14°59	S 17
M18	5 46 30	25°55'07	27°11	11°18	16°25	12°55	1°52	2°37	24°15	28°49	19°56	23°49	22°19	16°41	14°55	M18
T 19	5 50 26	26°56'07	11♊49	12°48	17°37	13°27	2° 1	2°44	24°12	28°51	19°57	23°44	22°16	16°47	14°52	T 19
W20	5 54 23	27°57'07	26° 0	14°19	18°49	13°59	2°11	2°51	24°10	28°52	19°58	23°40	22°12	16°54	14°48	W20
T 21	5 58 19	28°58'08	9♏42	15°49	20° 2	14°31	2°21	2°58	24° 7	28°53	19°59	23°37	22° 9	17° 1	14°45	T 21
F 22	6 2 16	29°59'10	22°55	17°20	21°14	15° 2	2°31	3° 5	24° 5	28°55	20° 1	23°35	22° 6	17° 7	14°42	F 22
S 23	6 6 12	1♊0'13	5♉43	18°51	22°27	15°34	2°41	3°12	24° 2	28°56	20° 2	23°D35	22° 3	17°14	14°38	S 23
S 24	6 10 9	2° 1'17	18° 9	20°23	23°39	16° 5	2°52	3°19	24° 0	28°57	20° 3	23°36	22° 0	17°21	14°35	S 24
M25	6 14 5	3° 2'22	0♉19	21°55	24°52	16°36	3° 2	3°26	23°57	28°58	20° 4	23°37	21°56	17°27	14°31	M25
T 26	6 18 2	4° 3'28	12°16	23°27	26° 5	17° 7	3°13	3°33	23°55	29° 0	20° 6	23°39	21°53	17°34	14°28	T 26
W27	6 21 59	5° 4'34	24° 7	24°59	27°17	17°38	3°23	3°40	23°52	29° 1	20° 7	23°R40	21°50	17°41	14°25	W27
T 28	6 25 55	6° 5'41	5♈54	26°31	28°30	18° 9	3°34	3°48	23°50	29° 2	20° 8	23°39	21°47	17°47	14°21	T 28
F 29	6 29 52	7° 6'49	17°40	28° 4	29°43	18°39	3°45	3°55	23°47	29° 3	20°10	23°36	21°44	17°54	14°18	F 29
S 30	6 33 48	8° 7'57	29°30	29°37	0♈56	19°10	3°56	4° 2	23°45	29° 4	20°11	23°30	21°41	18° 1	14°15	S 30
S 31	6 37 45	9♊9'05	11♊24	1♊10	2♈9	19°≈40	4♏7	4♊9	23°II42	29♉5	20°≈13	23♉23	21♉37	18°≈7	14°II12	S 31

Delta T = 268.49 sec