



Astrodienst Ephemeris Tables for the year 1663

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 D5EPX

ASTRODIENST EPHEMERIS for the year 1663
geocentric

JANUARY 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	Day
M 1	6 42 19	10 ³ 42'04	7 ¹ 57	18 ² 41	0 ³ 45	11 ³ 20	4 ² 25	11 ² 20	6 ² 38	13 ³ 0	22 ² R59	11 ² R53	12 ² 58	20 ² M53	2 ² 41	M 1
T 2	6 46 16	11 ¹ 43'14	19 ⁰ 9	19 ⁰ 55	2 ⁰ 0	12 ⁰ 6	4 ³ 37	11 ⁰ 26	6 ⁴ 41	13 ⁰ 3	22 ² II58	11 ² 52	12 ⁰ 54	21 ⁰ 0	2 ² 45	T 2
W 3	6 50 12	12 ⁰ 44'24	1 ¹ M3	21 ⁰ 11	3 ⁰ 16	12 ⁰ 52	4 ⁴ 49	11 ⁰ 32	6 ⁴ 44	13 ⁰ 5	22 ² 57	11 ⁰ 50	12 ⁰ 51	21 ⁰ 7	2 ² 50	W 3
T 4	6 54 9	13 ⁰ 45'34	12 ⁰ 53	22 ⁰ 29	4 ³ 1	13 ⁰ 39	5 ⁰ 1	11 ⁰ 39	6 ⁴ 48	13 ⁰ 7	22 ² 55	11 ⁰ 46	12 ⁰ 48	21 ⁰ 13	2 ² 54	T 4
F 5	6 58 5	14 ⁰ 46'45	24 ⁰ 44	23 ⁰ 47	5 ⁰ 47	14 ⁰ 25	5 ⁰ 13	11 ⁰ 45	6 ⁵ 51	13 ⁰ 10	22 ² 54	11 ⁰ 39	12 ⁰ 45	21 ⁰ 20	2 ² 59	F 5
S 6	7 2 2	15 ⁰ 47'55	6 ² 39	25 ⁰ 8	7 ⁰ 2	15 ⁰ 11	5 ⁰ 25	11 ⁰ 51	6 ⁵ 54	13 ⁰ 12	22 ² 53	11 ⁰ 30	12 ⁰ 42	21 ⁰ 27	3 ⁰ 4	S 6
S 7	7 5 58	16 ⁰ 49'05	18 ⁰ 42	26 ⁰ 29	8 ⁰ 18	15 ⁰ 58	5 ⁰ 37	11 ⁰ 58	6 ⁵ 58	13 ⁰ 14	22 ² 52	11 ⁰ 20	12 ⁰ 39	21 ⁰ 33	3 ⁰ 9	S 7
M 8	7 9 55	17 ⁰ 50'14	0 ³ 54	27 ⁰ 51	9 ⁰ 33	16 ⁰ 44	5 ⁰ 48	12 ⁰ 4	7 ⁰ 1	13 ⁰ 16	22 ² 51	11 ⁰ 9	12 ⁰ 35	21 ⁰ 40	3 ⁰ 13	M 8
T 9	7 13 52	18 ⁰ 51'24	13 ⁰ 17	29 ⁰ 14	10 ⁰ 48	17 ⁰ 31	6 ⁰ 0	12 ⁰ 10	7 ⁰ 4	13 ⁰ 19	22 ² 50	10 ⁰ 58	12 ⁰ 32	21 ⁰ 47	3 ⁰ 18	T 9
W10	7 17 48	19 ⁰ 52'33	25 ⁰ 51	0 ³ 39	12 ⁰ 4	18 ⁰ 17	6 ⁰ 11	12 ⁰ 16	7 ⁰ 8	13 ⁰ 21	22 ² 49	10 ⁰ 50	12 ⁰ 29	21 ⁰ 54	3 ⁰ 23	W10
T 11	7 21 45	20 ⁰ 53'42	8 ² 36	2 ⁰ 4	13 ⁰ 19	19 ⁰ 4	6 ⁰ 23	12 ⁰ 22	7 ⁰ 11	13 ⁰ 23	22 ² 48	10 ⁰ 43	12 ⁰ 26	22 ⁰ 0	3 ⁰ 28	T 11
F 12	7 25 41	21 ⁰ 54'49	21 ⁰ 33	3 ⁰ 30	14 ⁰ 35	19 ⁰ 51	6 ⁰ 34	12 ⁰ 28	7 ⁰ 14	13 ⁰ 25	22 ² 47	10 ⁰ 38	12 ⁰ 23	22 ⁰ 7	3 ⁰ 33	F 12
S 13	7 29 38	22 ⁰ 55'57	4 ² 30	4 ⁰ 56	15 ⁰ 50	20 ⁰ 37	6 ⁰ 45	12 ⁰ 34	7 ⁰ 18	13 ⁰ 28	22 ² 46	10 ⁰ D37	12 ⁰ 20	22 ⁰ 14	3 ⁰ 37	S 13
S 14	7 33 34	23 ⁰ 57'03	17 ⁰ 59	6 ⁰ 24	17 ⁰ 6	21 ⁰ 24	6 ⁰ 56	12 ⁰ 40	7 ⁰ 21	13 ⁰ 30	22 ² 45	10 ⁰ 37	12 ⁰ 16	22 ⁰ 20	3 ⁰ 42	S 14
M15	7 37 31	24 ⁰ 58'08	1 ² 31	7 ⁰ 52	18 ⁰ 21	22 ⁰ 11	7 ⁰ 7	12 ⁰ 46	7 ⁰ 25	13 ⁰ 32	22 ² 44	10 ⁰ 38	12 ⁰ 13	22 ⁰ 27	3 ⁰ 47	M15
T 16	7 41 27	25 ⁰ 59'13	15 ⁰ 15	9 ⁰ 20	19 ⁰ 36	22 ⁰ 57	7 ⁰ 18	12 ⁰ 52	7 ⁰ 28	13 ⁰ 34	22 ² 43	10 ⁰ 39	12 ⁰ 10	22 ⁰ 34	3 ⁰ 52	T 16
W17	7 45 24	27 ⁰ 0'16	29 ⁰ 12	10 ⁰ 50	20 ⁰ 52	23 ⁰ 44	7 ⁰ 29	12 ⁰ 58	7 ⁰ 32	13 ⁰ 37	22 ² 42	10 ⁰ R39	12 ⁰ 7	22 ⁰ 41	3 ⁰ 57	W17
T 18	7 49 21	28 ⁰ 1'19	13 ² 22	12 ⁰ 20	22 ⁰ 7	24 ⁰ 31	7 ⁰ 40	13 ⁰ 3	7 ⁰ 35	13 ⁰ 39	22 ² 41	10 ⁰ 38	12 ⁰ 4	22 ⁰ 47	4 ⁰ 2	T 18
F 19	7 53 17	29 ⁰ 2'20	27 ⁰ 44	13 ⁰ 51	23 ⁰ 22	25 ⁰ 18	7 ⁰ 51	13 ⁰ 9	7 ⁰ 39	13 ⁰ 41	22 ² 40	10 ⁰ 35	12 ⁰ 0	22 ⁰ 54	4 ⁰ 6	F 19
S 20	7 57 14	0 ² 3'20	12 ² II14	15 ⁰ 22	24 ⁰ 38	26 ⁰ 4	8 ⁰ 1	13 ⁰ 15	7 ⁰ 42	13 ⁰ 43	22 ² 39	10 ⁰ 31	11 ⁰ 57	23 ⁰ 1	4 ⁰ 11	S 20
S 21	8 1 10	1 ⁰ 4'20	26 ⁰ 47	16 ⁰ 54	25 ⁰ 53	26 ⁰ 51	8 ⁰ 12	13 ⁰ 20	7 ⁰ 45	13 ⁰ 46	22 ² 38	10 ⁰ 25	11 ⁰ 54	23 ⁰ 7	4 ⁰ 16	S 21
M22	8 5 7	2 ⁰ 5'18	11 ² 517	18 ⁰ 27	27 ⁰ 9	27 ⁰ 38	8 ⁰ 22	13 ⁰ 26	7 ⁰ 49	13 ⁰ 48	22 ² 37	10 ⁰ 18	11 ⁰ 51	23 ⁰ 14	4 ⁰ 21	M22
T 23	8 9 3	3 ⁰ 6'15	25 ⁰ 39	20 ⁰ 0	28 ⁰ 24	28 ⁰ 25	8 ⁰ 33	13 ⁰ 31	7 ⁰ 52	13 ⁰ 50	22 ² 37	10 ⁰ 12	11 ⁰ 48	23 ⁰ 21	4 ⁰ 26	T 23
W24	8 13 0	4 ⁰ 7'11	9 ² 45	21 ⁰ 34	29 ⁰ 39	29 ⁰ 12	8 ⁰ 43	13 ⁰ 36	7 ⁰ 56	13 ⁰ 52	22 ² 36	10 ⁰ 8	11 ⁰ 45	23 ⁰ 28	4 ⁰ 31	W24
T 25	8 16 56	5 ⁰ 8'06	23 ⁰ 31	23 ⁰ 9	0 ² 55	29 ⁰ 59	8 ⁰ 53	13 ⁰ 42	7 ⁰ 59	13 ⁰ 54	22 ² 35	10 ⁰ 5	11 ⁰ 41	23 ⁰ 34	4 ⁰ 36	T 25
F 26	8 20 53	6 ⁰ 9'01	6 ² 54	24 ⁰ 44	2 ⁰ 10	0 ² 46	9 ⁰ 3	13 ⁰ 47	8 ⁰ 3	13 ⁰ 56	22 ² 34	10 ⁰ D 4	11 ⁰ 38	23 ⁰ 41	4 ⁰ 40	F 26
S 27	8 24 50	7 ⁰ 9'54	19 ⁰ 55	26 ⁰ 20	3 ⁰ 25	1 ³ 33	9 ⁰ 13	13 ⁰ 52	8 ⁰ 6	13 ⁰ 59	22 ² 33	10 ⁰ 4	11 ⁰ 35	23 ⁰ 48	4 ⁰ 45	S 27
S 28	8 28 46	8 ⁰ 10'46	2 ² 35	27 ⁰ 57	4 ⁰ 40	2 ² 20	9 ⁰ 23	13 ⁰ 57	8 ⁰ 10	14 ⁰ 1	22 ² 32	10 ⁰ 5	11 ⁰ 32	23 ⁰ 54	4 ⁰ 50	S 28
M29	8 32 43	9 ⁰ 11'38	14 ⁰ 56	29 ⁰ 34	5 ⁰ 56	3 ⁰ 7	9 ⁰ 32	14 ⁰ 2	8 ⁰ 13	14 ⁰ 3	22 ² 32	10 ⁰ 7	11 ⁰ 29	24 ⁰ 1	4 ⁰ 55	M29
T 30	8 36 39	10 ⁰ 12'28	27 ⁰ 2	1 ² 12	7 ⁰ 11	3 ⁰ 54	9 ⁰ 42	14 ⁰ 7	8 ⁰ 17	14 ⁰ 5	22 ² 31	10 ⁰ 9	11 ⁰ 25	24 ⁰ 8	5 ⁰ 0	T 30
W31	8 40 36	11 ⁰ 13'18	8 ² M59	2 ² 51	8 ² 26	4 ² 41	9 ² 52	14 ² 12	8 ² 20	14 ² 7	22 ² II30	10 ² R10	11 ² 22	24 ² M15	5 ² 5	W31

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
M 1	23s 3	0s50	2n11	21s47	1n13	23s34	0s 6	23s53	0s54	20s21	0n44	20s38	1n33	19s14	0s37	22s 7	0n44	16n27	6s51	7n 7	6n42	13s24	13s16	6n30	
T 2	22 58	4 39	3 6	22 2	1 4	23 36	0 8	23 50	0 54	20 23	0 44	20 39	1 33	19 13	0 37	22 6	0 44	16 27	6 51	7 7	6 44	13 26	13 15	6 29	
W 3	22 52	8 14	3 52	22 16	0 56	23 37	0 10	23 46	0 54	20 25	0 44	20 40	1 33	19 13	0 37	22 6	0 44	16 27	6 51	7 8	6 45	13 27	13 14	6 29	
T 4	22 46	11 29	4 27	22 29	0 47	23 37	0 13	23 41	0 55	20 28	0 43	20 41	1 33	19 12	0 37	22 6	0 44	16 27	6 51	7 10	6 46	13 28	13 14	6 29	
F 5	22 40	14 16	4 52	22 42	0 39	23 36	0 15	23 37	0 55	20 30	0 43	20 42	1 33	19 11	0 37	22 6	0 44	16 27	6 51	7 12	6 47	13 30	13 13	6 29	
S 6	22 33	16 28	5 4	22 53	0 30	23 35	0 18	23 32	0 56	20 32	0 43	20 43	1 33	19 10	0 37	22 6	0 44	16 27	6 51	7 16	6 48	13 31	13 12	6 29	
S 7	22 25	17 59	5 2	23 4	0 22	23 33	0 20	23 27	0 56	20 34	0 43	20 43	1 33	19 9	0 37	22 5	0 44	16 27	6 51	7 20	6 50	13 33	13 11	6 29	
M 8	22 17	18 41	4 47	23 14	0 14	23 30	0 22	23 22	0 56	20 36	0 43	20 44	1 33	19 8	0 37	22 5	0 44	16 27	6 51	7 24	6 51	13 34	13 10	6 28	
T 9	22 9	18 32	4 18	23 23	0 6	23 27	0 25	23 16	0 57	20 38	0 43	20 45	1 33	19 8	0 37	22 5	0 44	16 27	6 51	7 28	6 52	13 35	13 9	6 28	
W10	22 0	17 28	3 37	23 31	0s 2	23 23	0 27	23 10	0 57	20 40	0 44	20 46	1 33	19 7	0 37	22 5	0 44	16 27	6 50	7 31	6 53	13 37	13 8	6 28	
T 11	21 51	15 31	2 43	23 38	0 10	23 18	0 29	23 4	0 57	20 42	0 44	20 47	1 33	19 6	0 37	22 4	0 44	16 27	6 50	7 34	6 54	13 38	13 7	6 28	
F 12	21 42	12 45	1 41	23 43	0 17	23 12	0 31	22 58	0 58	20 44	0 44	20 47	1 33	19 5	0 37	22 4	0 44	16 27	6 50	7 35	6 56	13 40	13 6	6 28	
S 13	21 32	9 19	0 32	23 48	0 24	23 6	0 34	22 51	0 58	20 46	0 44	20 48	1 33	19 4	0 37	22 4	0 44	16 28	6 50	7 36	6 57	13 41	13 5	6 28	
S 14	21 21	5 22	0s40	23 51	0 32	22 59	0 36	22 44	0 58	20 47	0 44	20 49	1 33	19 3	0 36	22 4	0 44	16 28	6 50	7 36	6 58	13 42	13 4	6 28	
M15	21 10	1 5	1 51	23 53	0 39	22 51	0 38	22 37	0 58	20 49	0 44	20 49	1 33	19 2	0 36	22 4	0 44	16 28	6 50	7 36	6 59	13 44	13 3	6 28	
T 16	20 59	3n18	2 56	23 54	0 45	22 42	0 40	22 29	0 59	20 51	0 44	20 50	1 33	19 1	0 36	22 3	0 44	16 28	6 50	7 35	7 1	13 45	13 2	6 28	
W17	20 48	7 35	3 52	23 54	0 52	22 33	0 42	22 22	0 59	20 53	0 44	20 51	1 34	19 1	0 36	22 3	0 44	16 28	6 49	7 35	7 2	13 46	13 1	6 28	
T 18	20 36	11 30	4 35	23 52	0 58	22 23	0 44	22 14	0 59	20 55	0 44	20 51	1 34	19 0	0 36	22 3	0 44	16 28	6 49	7 35	7 3	13 48	13 0	6 27	
F 19	20 23	14 47	5 2	23 49	1 4	22 13	0 46	22 6	1 0	20 56	0 44	20 52	1 34	18 59	0 36	22 3	0 44	16 28	6 49	7 37	7 4	13 49	12 59	6 27	
S 20	20 10	17 11	5 9	23 45	1 10	22 2	0 48	21 57	1 0	20 58	0 44	20 53	1 34	18 58	0 36	22 2	0 44	16 28	6 49	7 38	7 5	13 51	12 58	6 27	
S 21	19 57	18 29	4 57	23 40	1 16	21 50	0 50	21 48	1 0	21 0	0 44	20 53	1 34	18 57	0 36	22 2	0 44	16 28	6 49	7 41	7 7	13 52	12 57	6 27	
M22	19 44	18 35	4 26	23 33	1 21	21 37	0 52	21 39	1 0	21 1	0 44	20 54	1 34	18 56	0 36	22 2	0 44	16 28	6 49	7 43	7 8	13 53	12 56	6 27	
T 23	19 30	17 29	3 38	23 24	1 26	21 24	0 54	21 30	1 1	21 3	0 44	20 55	1 34	18 55	0 36	22 2	0 44	16 28	6 49	7 45	7 9	13 55	12 55	6 27	
W24	19 16	15 19	2 38	23 15	1 31	21 10	0 56	21 21	1 1	21 4	0 44	20 55	1 34	18 54	0 36	22 2	0 44	16 29	6 48	7 47	7 10	13 56	12 54	6 27	
T 25	19 1	12 18	1 29	23 4	1 35	20 56	0 58	21 11	1 1	21 6	0 44	20 56	1 34	18 53	0 37	22 1	0 44	16 29	6 48	7 48	7 11	13 57	12 52	6 27	
F 26	18 46	8 43	0 17	22 51	1 40	20 41	0 59	21 1	1 2	21 8	0 44	20 56	1 34	18 52	0 37	22 1	0 44	16 29	6 48	7 49	7 13	13 59	12 51	6 27	
S 27	18 31	4 49	0n54	22 37	1 44	20 25	1 1	20 51	1 2	21 9	0 44	20 57	1 34	18 52	0 37	22 1	0 44	16 29	6 48	7 48	7 14	14 0	12 50	6 27	
S 28	18 15	0 49	2 0	22 22	1 47	20 9	1 3	20 41	1 2	21 10	0 44	20 57	1 34	18 51	0 37	22 1	0 44	16 29	6 48	7 48	7 15	14 2	12 49	6 27	
M29	17 59	3s 8	2 59	22 5	1 51	19 52	1 4	20 30	1 2	21 12	0 44	20 58	1 34	18 50	0 37	22 0	0 44	16 29	6 48	7 47	7 16	14 3	12 48	6 27	
T 30	17 43	6 52	3 49	21 46	1 54	19 34	1 6	20 19	1 2	21 13	0 44	20 58	1 34	18 49	0 37	22 0	0 44	16 29	6 48	7 47	7 18	14 4	12 47	6 27	
W31	17s26	10s16	4n29	21s27	1s56	19s16	1s 7	20s 8	1s 3	21s15	0n44	20s59	1n34	18s48	0s37	22s 0	0n44	16n29	6s47	7n46	7n19	14s 6	12s46	6n27	

ASTRODIENST EPHEMERIS for the year 1663

geocentric

FEBRUARY 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	8 44 32	12≈14'07	20♐51	4≈31	9≈42	5≈28	10♌1	14♌17	8≈24	14♌3	22°R29	10°R 9	11♐19	24♐21	5≈10	T 1
F 2	8 48 29	13°14'55	2♌43	6°11	10°57	6°15	10°10	14°21	8°27	14°11	22♐29	10♐8	11°16	24°28	5°14	F 2
S 3	8 52 25	14°15'42	14°40	7°52	12°12	7° 2	10°19	14°26	8°31	14°13	22°28	10° 5	11°13	24°35	5°19	S 3
S 4	8 56 22	15°16'28	26°46	9°34	13°27	7°49	10°28	14°31	8°34	14°15	22°27	10° 1	11°10	24°41	5°24	S 4
M 5	9 0 19	16°17'12	9♌4	11°17	14°43	8°37	10°37	14°35	8°38	14°17	22°27	9°57	11° 6	24°48	5°29	M 5
T 6	9 4 15	17°17'56	21°37	13° 1	15°58	9°24	10°46	14°40	8°41	14°19	22°26	9°53	11° 3	24°55	5°34	T 6
W 7	9 8 12	18°18'38	4≈25	14°45	17°13	10°11	10°55	14°44	8°45	14°21	22°25	9°50	11° 0	25° 2	5°38	W 7
T 8	9 12 8	19°19'19	17°29	16°30	18°28	10°58	11° 3	14°48	8°48	14°23	22°25	9°47	10°57	25° 8	5°43	T 8
F 9	9 16 5	20°19'58	0♌48	18°17	19°43	11°45	11°12	14°53	8°52	14°25	22°24	9°46	10°54	25°15	5°48	F 9
S 10	9 20 1	21°20'36	14°21	20° 4	20°59	12°32	11°20	14°57	8°55	14°27	22°24	9°D46	10°51	25°22	5°53	S 10
S 11	9 23 58	22°21'12	28° 6	21°51	22°14	13°20	11°28	15° 1	8°59	14°29	22°23	9°47	10°47	25°28	5°57	S 11
M12	9 27 54	23°21'47	12♌1	23°40	23°29	14° 7	11°36	15° 5	9° 2	14°31	22°23	9°48	10°44	25°35	6° 2	M12
T 13	9 31 51	24°22'20	26° 3	25°29	24°44	14°54	11°44	15° 9	9° 5	14°33	22°22	9°49	10°41	25°42	6° 7	T 13
W14	9 35 48	25°22'51	10♌10	27°20	25°59	15°41	11°52	15°12	9° 9	14°34	22°22	9°50	10°38	25°49	6°11	W14
T 15	9 39 44	26°23'20	24°21	29°11	27°14	16°29	12° 0	15°16	9°12	14°36	22°21	9°R50	10°35	25°55	6°16	T 15
F 16	9 43 41	27°23'47	8♐33	1♌ 2	28°29	17°16	12° 7	15°20	9°16	14°38	22°21	9°50	10°31	26° 2	6°21	F 16
S 17	9 47 37	28°24'12	22°44	2°54	29°45	18° 3	12°15	15°23	9°19	14°40	22°20	9°49	10°28	26° 9	6°25	S 17
S 18	9 51 34	29°24'36	6♌51	4°47	1♌ 0	18°50	12°22	15°27	9°22	14°42	22°20	9°48	10°25	26°16	6°30	S 18
M19	9 55 30	0♌24'57	20°51	6°40	2°15	19°38	12°29	15°30	9°26	14°43	22°20	9°47	10°22	26°22	6°34	M19
T 20	9 59 27	1°25'16	4♐42	8°34	3°30	20°25	12°36	15°34	9°29	14°45	22°19	9°46	10°19	26°29	6°39	T 20
W21	10 3 23	2°25'34	18°21	10°27	4°45	21°12	12°43	15°37	9°32	14°47	22°19	9°45	10°16	26°36	6°43	W21
T 22	10 7 20	3°25'50	1♐46	12°21	6° 0	21°59	12°49	15°40	9°36	14°48	22°19	9°45	10°12	26°42	6°48	T 22
F 23	10 11 17	4°26'04	14°54	14°14	7°15	22°47	12°56	15°43	9°39	14°50	22°18	9°D45	10° 9	26°49	6°52	F 23
S 24	10 15 13	5°26'16	27°45	16° 7	8°30	23°34	13° 2	15°46	9°42	14°52	22°18	9°45	10° 6	26°56	6°57	S 24
S 25	10 19 10	6°26'26	10♐20	17°59	9°45	24°21	13° 8	15°49	9°45	14°53	22°18	9°45	10° 3	27° 3	7° 1	S 25
M26	10 23 6	7°26'35	22°40	19°50	10°59	25° 8	13°14	15°52	9°48	14°55	22°18	9°46	10° 0	27° 9	7° 5	M26
T 27	10 27 3	8°26'42	4♐47	21°39	12°14	25°56	13°20	15°54	9°52	14°56	22°18	9°46	9°57	27°16	7°10	T 27
W28	10 30 59	9♌26'48	16♐46	23♌26	13♌29	26≈43	13♌26	15♌57	9≈55	14♌58	22♐17	9°R46	9♐53	27♐23	7≈14	W28

Day	☉	☾		♀		♀		♂		♂		♂	♂		♂		♂		♂	♂	♂	♂	♂	♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	17s 9	13s14	4n56	21s 5	1s59	18s58	1s 9	19s57	1s 3	21s16	0n44	20s59	1n34	18s47	0s37	22s 0	0n44	16n29	6s47	7n46	7n20	14s 7	12s45	6n27	
F 2	16 52	15 39	5 11	20 42	2 1	18 38	1 10	19 46	1 3	21 17	0 44	21 0	1 34	18 46	0 37	22 0	0 44	16 30	6 47	7 47	7 21	14 8	12 43	6 27	
S 3	16 35	17 25	5 13	20 18	2 2	18 19	1 12	19 34	1 3	21 19	0 44	21 0	1 35	18 45	0 37	21 59	0 44	16 30	6 47	7 48	7 22	14 10	12 42	6 27	
S 4	16 17	18 26	5 0	19 52	2 4	17 58	1 13	19 22	1 3	21 20	0 44	21 1	1 35	18 44	0 37	21 59	0 44	16 30	6 47	7 50	7 24	14 11	12 41	6 27	
M 5	15 59	18 36	4 34	19 25	2 4	17 38	1 14	19 10	1 4	21 21	0 44	21 1	1 35	18 43	0 37	21 59	0 44	16 30	6 46	7 51	7 25	14 12	12 40	6 28	
T 6	15 41	17 53	3 55	18 56	2 5	17 17	1 15	18 57	1 4	21 22	0 44	21 2	1 35	18 42	0 37	21 59	0 44	16 30	6 46	7 53	7 26	14 14	12 39	6 28	
W 7	15 22	16 14	3 3	18 26	2 5	16 55	1 16	18 45	1 4	21 24	0 44	21 2	1 35	18 42	0 37	21 59	0 44	16 30	6 46	7 54	7 27	14 15	12 37	6 28	
T 8	15 3	13 43	2 0	17 54	2 4	16 33	1 17	18 32	1 4	21 25	0 44	21 2	1 35	18 41	0 37	21 58	0 44	16 30	6 46	7 55	7 28	14 16	12 36	6 28	
F 9	14 44	10 26	0 49	17 20	2 4	16 10	1 18	18 19	1 4	21 26	0 44	21 3	1 35	18 40	0 37	21 58	0 44	16 31	6 46	7 55	7 30	14 18	12 35	6 28	
S 10	14 25	6 33	0s25	16 45	2 2	15 47	1 19	18 6	1 4	21 27	0 44	21 3	1 35	18 39	0 37	21 58	0 44	16 31	6 46	7 55	7 31	14 19	12 34	6 28	
S 11	14 5	2 17	1 40	16 9	2 0	15 23	1 20	17 53	1 5	21 28	0 44	21 4	1 35	18 38	0 37	21 58	0 44	16 31	6 45	7 55	7 32	14 20	12 33	6 28	
M12	13 45	2n10	2 49	15 31	1 58	14 59	1 21	17 39	1 5	21 29	0 44	21 4	1 35	18 37	0 37	21 58	0 44	16 31	6 45	7 55	7 33	14 22	12 31	6 28	
T 13	13 25	6 31	3 49	14 51	1 55	14 35	1 22	17 26	1 5	21 30	0 44	21 4	1 35	18 36	0 37	21 57	0 44	16 31	6 45	7 54	7 34	14 23	12 30	6 28	
W14	13 5	10 32	4 35	14 10	1 52	14 10	1 23	17 12	1 5	21 31	0 44	21 5	1 35	18 35	0 37	21 57	0 44	16 31	6 45	7 54	7 36	14 24	12 29	6 28	
T 15	12 45	13 58	5 5	13 28	1 48	13 45	1 23	16 58	1 5	21 32	0 44	21 5	1 36	18 34	0 37	21 57	0 44	16 32	6 45	7 54	7 37	14 26	12 28	6 28	
F 16	12 24	16 34	5 16	12 44	1 44	13 20	1 24	16 43	1 5	21 33	0 44	21 5	1 36	18 34	0 37	21 57	0 44	16 32	6 44	7 54	7 38	14 27	12 26	6 29	
S 17	12 3	18 9	5 8	11 59	1 38	12 54	1 24	16 29	1 5	21 34	0 44	21 6	1 36	18 33	0 37	21 56	0 44	16 32	6 44	7 54	7 39	14 28	12 25	6 29	
S 18	11 42	18 37	4 42	11 13	1 33	12 28	1 25	16 14	1 5	21 35	0 44	21 6	1 36	18 32	0 37	21 56	0 44	16 32	6 44	7 54	7 40	14 30	12 24	6 29	
M19	11 21	17 55	3 59	10 25	1 27	12 1	1 25	16 0	1 5	21 36	0 44	21 6	1 36	18 31	0 37	21 56	0 44	16 32	6 44	7 55	7 42	14 31	12 23	6 29	
T 20	10 59	16 10	3 2	9 36	1 20	11 34	1 26	15 45	1 6	21 37	0 44	21 6	1 36	18 30	0 37	21 56	0 44	16 32	6 44	7 55	7 43	14 32	12 21	6 29	
W21	10 38	13 31	1 56	8 46	1 12	11 7	1 26	15 30	1 6	21 37	0 45	21 7	1 36	18 29	0 37	21 56	0 44	16 33	6 44	7 56	7 44	14 34	12 20	6 29	
T 22	10 16	10 11	0 44	7 55	1 4	10 40	1 26	15 14	1 6	21 38	0 45	21 7	1 36	18 28	0 37	21 56	0 44	16 33	6 43	7 56	7 45	14 35	12 19	6 30	
F 23	9 54	6 24	0n29	7 4	0 55	10 12	1 26	14 59	1 6	21 39	0 45	21 7	1 36	18 27	0 37	21 55	0 44	16 33	6 43	7 56	7 46	14 36	12 18	6 30	
S 24	9 32	2 24	1 38	6 11	0 46	9 44	1 26	14 43	1 6	21 40	0 45	21 7	1 36	18 27	0 37	21 55	0 44	16 33	6 43	7 56	7 48	14 38	12 16	6 30	
S 25	9 10	1s37	2 42	5 18	0 36	9 16	1 26	14 28	1 6	21 41	0 45	21 8	1 36	18 26	0 37	21 55	0 44	16 33	6 43	7 56	7 49	14 39	12 15	6 30	
M26	8 47	5 29	3 36	4 25	0 25	8 47	1 26	14 12	1 6	21 41	0 45	21 8	1 37	18 25	0 37	21 55	0 44	16 33	6 43	7 55	7 50	14 40	12 14	6 30	
T 27	8 25	9 3	4 20	3 32	0 14	8 18	1 26	13 56	1 6	21 42	0 45	21 8	1 37	18 24	0 37	21 55	0 44	16 34	6 42	7 55	7 51	14 41	12 13	6 31	
W28	8s 2	12s12	4n52	2s39	0s 2	7s49	1s26	13s40	1s 6	21s43	0n45	21s 8	1n37	18s23	0s37	21s54	0n44	16n34	6s42	7n55	7n52	14s43	12s11	6n31	

ASTRODIENST EPHEMERIS for the year 1663

geocentric

MARCH 1663 GC

00:00 UT

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

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	7s40	14s50	5n11	1s46	0n10	7s20	1s26	13s23	1s 6	21s43	0n45	21s 8	1n37	18s22	0s37	21s54
F 2	7 17	16 50	5 17	0 54	0 23	6 51	1 25	13 7	1 6	21 44	0 45	21 8	1 37	18 22	0 37	21 54
S 3	6 54	18 7	5 9	0 3	0 36	6 21	1 25	12 51	1 6	21 44	0 45	21 9	1 37	18 21	0 37	21 54
S 4	6 31	18 36	4 48	0n47	0 49	5 52	1 25	12 34	1 6	21 45	0 45	21 9	1 37	18 20	0 37	21 54
M 5	6 8	18 13	4 13	1 36	1 2	5 22	1 24	12 17	1 6	21 46	0 45	21 9	1 37	18 19	0 37	21 54
T 6	5 45	16 57	3 25	2 22	1 16	4 52	1 24	12 0	1 6	21 46	0 45	21 9	1 37	18 18	0 37	21 53
W 7	5 22	14 46	2 26	3 6	1 29	4 22	1 23	11 43	1 6	21 47	0 45	21 9	1 37	18 18	0 37	21 53
T 8	4 58	11 46	1 17	3 48	1 43	3 51	1 22	11 26	1 6	21 47	0 45	21 9	1 38	18 17	0 37	21 53
F 9	4 35	8 3	0 3	4 26	1 56	3 21	1 22	11 9	1 6	21 48	0 45	21 9	1 38	18 16	0 37	21 53
S 10	4 11	3 48	1s14	5 2	2 9	2 51	1 21	10 52	1 6	21 48	0 45	21 9	1 38	18 15	0 37	21 53
S 11	3 48	0n43	2 27	5 34	2 21	2 20	1 20	10 34	1 6	21 48	0 45	21 9	1 38	18 14	0 37	21 53
M12	3 24	5 15	3 32	6 3	2 33	1 50	1 19	10 17	1 6	21 49	0 45	21 9	1 38	18 14	0 37	21 52
T 13	3 1	9 31	4 24	6 28	2 44	1 19	1 18	9 59	1 6	21 49	0 45	21 9	1 38	18 13	0 37	21 52
W14	2 37	13 12	4 59	6 48	2 54	0 48	1 17	9 42	1 5	21 49	0 45	21 9	1 38	18 12	0 37	21 52
T 15	2 13	16 3	5 15	7 5	3 3	0 17	1 16	9 24	1 5	21 50	0 45	21 9	1 38	18 11	0 37	21 52
F 16	1 50	17 54	5 11	7 18	3 11	0n13	1 15	9 6	1 5	21 50	0 46	21 9	1 38	18 11	0 37	21 52
S 17	1 26	18 37	4 49	7 26	3 17	0 44	1 13	8 48	1 5	21 50	0 46	21 9	1 38	18 10	0 37	21 52
S 18	1 2	18 12	4 10	7 29	3 23	1 15	1 12	8 30	1 5	21 51	0 46	21 9	1 39	18 9	0 37	21 52
M19	0 39	16 44	3 17	7 28	3 26	1 46	1 11	8 12	1 5	21 51	0 46	21 9	1 39	18 9	0 37	21 52
T 20	0 15	14 21	2 15	7 23	3 28	2 16	1 9	7 54	1 5	21 51	0 46	21 9	1 39	18 8	0 37	21 51
W21	0n 9	11 14	1 6	7 14	3 29	2 47	1 8	7 36	1 5	21 51	0 46	21 9	1 39	18 7	0 37	21 51
T 22	0 32	7 38	0n 5	7 0	3 27	3 18	1 6	7 18	1 5	21 51	0 46	21 9	1 39	18 7	0 37	21 51
F 23	0 56	3 43	1 15	6 43	3 24	3 48	1 5	6 59	1 4	21 52	0 46	21 9	1 39	18 6	0 37	21 51
S 24	1 20	0s18	2 20	6 22	3 19	4 18	1 3	6 41	1 4	21 52	0 46	21 9	1 39	18 5	0 37	21 51
S 25	1 43	4 14	3 17	5 59	3 13	4 49	1 2	6 23	1 4	21 52	0 46	21 9	1 39	18 5	0 37	21 51
M26	2 7	7 56	4 4	5 32	3 4	5 19	1 0	6 4	1 4	21 52	0 46	21 9	1 39	18 4	0 38	21 51
T 27	2 30	11 16	4 40	5 4	2 55	5 49	0 58	5 46	1 4	21 52	0 46	21 9	1 40	18 3	0 38	21 51
W28	2 54	14 6	5 3	4 33	2 43	6 19	0 56	5 27	1 4	21 52	0 46	21 9	1 40	18 3	0 38	21 51
T 29	3 17	16 20	5 12	4 2	2 31	6 49	0 55	5 9	1 3	21 52	0 46	21 8	1 40	18 2	0 38	21 50
F 30	3 40	17 51	5 9	3 30	2 17	7 19	0 53	4 50	1 3	21 52	0 46	21 8	1 40	18 2	0 38	21 50
S 31	4n 3	18s37	4n52	2n59	2n 2	7n48	0s51	4s31	1s 3	21s52	0n46	21s 8	1n40	18s 1	0s38	21s50

Julian Day Number = 2328517.5, Delta T = 34.24 sec
 Ecliptic obliquity = 23°28'51, Nutation = - 0°00'05, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°02'19, Lahiri = 19°09'20Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1663

geocentric

MAY 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	14 35 26	10♌28'37	15♌39	14♌47	0♏10	14♌57	13♌37	15♌29	12♌6	15♌33	22♏50	7♏D34	6♏36	4♌19	10♌9	T 1
W 2	14 39 22	11♌26'41	28♌29	16♌6	1♌23	15♌43	13♌31	15♌26	12♌6	15♌32	22♌51	7♏35	6♌33	4♌26	10♌10	W 2
T 3	14 43 19	12♌24'43	11♌44	17♌27	2♌36	16♌29	13♌26	15♌23	12♌7	15♌32	22♌52	7♏35	6♌30	4♌33	10♌10	T 3
F 4	14 47 15	13♌22'44	25♌27	18♌50	3♌50	17♌14	13♌20	15♌20	12♌8	15♌31	22♌53	7♏33	6♌27	4♌40	10♌11	F 4
S 5	14 51 12	14♌20'44	9♌39	20♌15	5♌3	18♌0	13♌15	15♌16	12♌8	15♌31	22♌54	7♏30	6♌24	4♌46	10♌12	S 5
S 6	14 55 8	15♌18'42	24♌18	21♌43	6♌16	18♌45	13♌9	15♌13	12♌9	15♌30	22♌55	7♏24	6♌20	4♌53	10♌13	S 6
M 7	14 59 5	16♌16'39	9♌19	23♌12	7♌29	19♌31	13♌3	15♌9	12♌9	15♌30	22♌57	7♏16	6♌17	5♌0	10♌13	M 7
T 8	15 3 1	17♌14'34	24♌32	24♌44	8♌43	20♌16	12♌57	15♌6	12♌10	15♌29	22♌58	7♏6	6♌14	5♌7	10♌14	T 8
W 9	15 6 58	18♌12'28	9♏47	26♌18	9♌56	21♌1	12♌50	15♌2	12♌10	15♌28	22♌59	6♌56	6♌11	5♌13	10♌14	W 9
T 10	15 10 54	19♌10'20	24♌53	27♌54	11♌9	21♌47	12♌44	14♌58	12♌11	15♌28	23♌0	6♌47	6♌8	5♌20	10♌15	T 10
F 11	15 14 51	20♌8'11	9♏41	29♌32	12♌22	22♌32	12♌38	14♌54	12♌11	15♌27	23♌1	6♌39	6♌5	5♌27	10♌15	F 11
S 12	15 18 48	21♌6'00	24♌4	1♌13	13♌35	23♌17	12♌31	14♌51	12♌11	15♌26	23♌3	6♌35	6♌1	5♌33	10♌15	S 12
S 13	15 22 44	22♌3'47	8♏1	2♌55	14♌48	24♌2	12♌25	14♌47	12♌11	15♌25	23♌4	6♌32	5♌58	5♌40	10♌15	S 13
M14	15 26 41	23♌1'32	21♌31	4♌39	16♌1	24♌47	12♌18	14♌43	12♌12	15♌24	23♌5	6♌D32	5♌55	5♌47	10♌16	M14
T 15	15 30 37	23♌59'16	4♏37	6♌26	17♌14	25♌32	12♌11	14♌39	12♌12	15♌24	23♌6	6♌R32	5♌52	5♌54	10♌16	T 15
W16	15 34 34	24♌56'58	17♌23	8♌15	18♌27	26♌17	12♌4	14♌35	12♌12	15♌23	23♌8	6♌31	5♌49	6♌0	10♌16	W16
T 17	15 38 30	25♌54'39	29♌52	10♌5	19♌40	27♌2	11♌57	14♌31	12♌R12	15♌22	23♌9	6♌29	5♌45	6♌7	10♌16	T 17
F 18	15 42 27	26♌52'17	12♏19	11♌58	20♌53	27♌47	11♌50	14♌27	12♌12	15♌21	23♌10	6♌25	5♌42	6♌14	10♌15	F 18
S 19	15 46 23	27♌49'55	24♌17	13♌53	22♌6	28♌32	11♌43	14♌23	12♌12	15♌20	23♌12	6♌18	5♌39	6♌20	10♌15	S 19
S 20	15 50 20	28♌47'31	6♏18	15♌50	23♌19	29♌16	11♌36	14♌19	12♌12	15♌19	23♌13	6♌8	5♌36	6♌27	10♌15	S 20
M21	15 54 17	29♌45'06	18♌15	17♌49	24♌31	0♌1	11♌28	14♌14	12♌11	15♌18	23♌14	5♌56	5♌33	6♌34	10♌15	M21
T 22	15 58 13	0♏42'39	0♌9	19♌50	25♌44	0♌46	11♌21	14♌10	12♌11	15♌17	23♌16	5♌43	5♌30	6♌41	10♌14	T 22
W23	16 2 10	1♌40'12	12♌2	21♌52	26♌57	1♌30	11♌14	14♌6	12♌11	15♌16	23♌17	5♌29	5♌26	6♌47	10♌14	W23
T 24	16 6 6	2♌37'43	23♌55	23♌57	28♌9	2♌15	11♌6	14♌2	12♌11	15♌15	23♌18	5♌15	5♌23	6♌54	10♌13	T 24
F 25	16 10 3	3♌35'14	5♌39	26♌3	29♌22	2♌59	10♌59	13♌57	12♌10	15♌14	23♌20	5♌4	5♌20	7♌1	10♌12	F 25
S 26	16 13 59	4♌32'43	17♌48	28♌10	0♌35	3♌44	10♌51	13♌53	12♌10	15♌13	23♌21	4♌55	5♌17	7♌8	10♌12	S 26
S 27	16 17 56	5♌30'11	29♌53	0♏19	1♌47	4♌28	10♌43	13♌49	12♌9	15♌12	23♌22	4♌49	5♌14	7♌14	10♌11	S 27
M28	16 21 53	6♌27'39	12♌8	2♌29	3♌0	5♌13	10♌36	13♌44	12♌9	15♌11	23♌24	4♌46	5♌11	7♌21	10♌10	M28
T 29	16 25 49	7♌25'06	24♌37	4♌40	4♌12	5♌57	10♌28	13♌40	12♌8	15♌9	23♌25	4♌45	5♌7	7♌28	10♌9	T 29
W30	16 29 46	8♌22'32	7♌24	6♌52	5♌25	6♌41	10♌21	13♌36	12♌8	15♌8	23♌26	4♌45	5♌4	7♌34	10♌8	W30
T 31	16 33 42	9♏19'58	20♌34	9♏4	6♌37	7♌25	10♌13	13♌31	12♌8	15♌7	23♌28	4♏44	5♏1	7♌41	10♌8	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	lat
T 1	14n59	14s21	1n54	3n 6	2s58	20n36	0n24	5n 5	0s53	21s42	0n46	21s 0	1n42	17s49	0s39	21s50
W 2	15 17	11 16	0 48	3 37	2 57	20 54	0 26	5 23	0 53	21 42	0 46	20 59	1 42	17 49	0 39	21 50
T 3	15 35	7 31	0s22	4 9	2 56	21 11	0 29	5 41	0 52	21 41	0 46	20 59	1 42	17 49	0 39	21 50
F 4	15 53	3 15	1 34	4 42	2 54	21 28	0 31	5 59	0 52	21 40	0 46	20 59	1 42	17 49	0 39	21 50
S 5	16 10	1n21	2 42	5 16	2 52	21 44	0 34	6 17	0 52	21 40	0 46	20 58	1 42	17 48	0 39	21 50
S 6	16 27	6 0	3 41	5 52	2 49	21 59	0 36	6 34	0 51	21 39	0 46	20 58	1 42	17 48	0 39	21 50
M 7	16 44	10 24	4 27	6 28	2 46	22 14	0 39	6 52	0 51	21 38	0 46	20 57	1 42	17 48	0 39	21 50
T 8	17 1	14 10	4 55	7 5	2 42	22 28	0 41	7 9	0 50	21 38	0 46	20 57	1 42	17 48	0 39	21 50
W 9	17 17	16 59	5 2	7 44	2 37	22 42	0 44	7 27	0 50	21 37	0 46	20 57	1 42	17 48	0 39	21 50
T 10	17 33	18 36	4 47	8 23	2 32	22 55	0 46	7 44	0 49	21 36	0 46	20 56	1 42	17 48	0 39	21 50
F 11	17 48	18 55	4 14	9 3	2 26	23 7	0 49	8 2	0 49	21 35	0 46	20 56	1 42	17 48	0 39	21 50
S 12	18 4	17 58	3 25	9 43	2 20	23 19	0 51	8 19	0 48	21 34	0 46	20 55	1 42	17 48	0 39	21 50
S 13	18 19	15 58	2 25	10 25	2 14	23 30	0 53	8 36	0 48	21 34	0 46	20 55	1 42	17 48	0 39	21 50
M14	18 34	13 7	1 19	11 6	2 7	23 40	0 56	8 53	0 47	21 33	0 46	20 54	1 42	17 48	0 39	21 50
T 15	18 48	9 41	0 10	11 49	1 59	23 50	0 58	9 10	0 47	21 32	0 46	20 54	1 42	17 48	0 39	21 51
W16	19 2	5 52	0n57	12 32	1 51	23 59	1 1	9 27	0 46	21 31	0 46	20 54	1 42	17 48	0 39	21 51
T 17	19 16	1 53	2 0	13 15	1 42	24 7	1 3	9 43	0 46	21 30	0 46	20 53	1 42	17 48	0 39	21 51
F 18	19 30	2s 6	2 56	13 58	1 34	24 15	1 5	10 0	0 45	21 29	0 46	20 53	1 42	17 48	0 39	21 51
S 19	19 43	5 58	3 44	14 41	1 24	24 22	1 7	10 16	0 45	21 29	0 46	20 52	1 42	17 48	0 39	21 51
S 20	19 55	9 32	4 21	15 25	1 15	24 28	1 9	10 33	0 44	21 28	0 46	20 52	1 42	17 48	0 39	21 51
M21	20 8	12 43	4 46	16 8	1 5	24 33	1 12	10 49	0 44	21 27	0 45	20 51	1 42	17 48	0 40	21 51
T 22	20 20	15 21	4 58	16 51	0 55	24 38	1 14	11 5	0 43	21 26	0 45	20 51	1 42	17 48	0 40	21 51
W23	20 32	17 21	4 58	17 33	0 44	24 42	1 16	11 21	0 43	21 25	0 45	20 50	1 42	17 48	0 40	21 51
T 24	20 43	18 37	4 44	18 15	0 34	24 46	1 18	11 37	0 42	21 24	0 45	20 50	1 42	17 48	0 40	21 51
F 25	20 54	19 3	4 18	18 55	0 23	24 48	1 20	11 53	0 42	21 23	0 45	20 49	1 42	17 49	0 40	21 52
S 26	21 5	18 39	3 41	19 35	0 12	24 50	1 21	12 8	0 41	21 22	0 45	20 49	1 42	17 49	0 40	21 52
S 27	21 16	17 24	2 53	20 14	0 2	24 51	1 23	12 24	0 40	21 21	0 45	20 48	1 42	17 49	0 40	21 52
M28	21 26	15 19	1 57	20 50	0n 9	24 52	1 25	12 39	0 40	21 20	0 45	20 48	1 42	17 49	0 40	21 52
T 29	21 35	12 30	0 53	21 26	0 19	24 52	1 27	12 55	0 39	21 19	0 45	20 47	1 42	17 49	0 40	21 52
W30	21 44	9 2	0s14	21 59	0 30	24 51	1 29	13 10	0 39	21 18	0 45	20 47	1 42	17 49	0 40	21 52
T 31	21n53	5s 1	1s23	22n30	0n40	24n49	1n30	13n25	0s38	21s17	0n44	20s46	1n42	17s50	0s40	21s52

Julian Day Number = 2328578.5, Delta T = 34.13 sec
 Ecliptic obliquity = 23°28'51", Nutation = - 0°00'08", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°02'27", Lahiri = 19°09'28"Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1663

geocentric

JUNE 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
F 1	16 37 39	10 ^{II} 17'22	4 ^{VI} 10	11 ^{II} 16	7 ^{III} 49	8 ^{III} 9	10 ^R 5	13 ^R 27	12 ^R 6	15 ^R 6	23 ^{II} 29	4 ^R 43	4 ^{III} 58	7 ^{III} 48	10 ^R 6	F 1	
S 2	16 41 35	11°14'47	18°15	13°28	9° 2	8°54	9 ^{III} 58	13 ^{III} 22	12 ^{III} 6	15 ^{III} 4	23°31	4 ^{III} 39	4°55	7°55	10 ^{III} 5	S 2	
S 3	16 45 32	12°12'10	2 ^{III} 48	15°39	10°14	9°38	9°50	13°18	12° 5	15° 3	23°32	4°33	4°51	8° 1	10° 4	S 3	
M 4	16 49 28	13° 9'33	17°44	17°50	11°26	10°21	9°42	13°13	12° 4	15° 2	23°33	4°25	4°48	8° 8	10° 3	M 4	
T 5	16 53 25	14° 6'56	2 ^{II} 57	20° 0	12°39	11° 5	9°35	13° 9	12° 3	15° 1	23°35	4°15	4°45	8°15	10° 1	T 5	
W 6	16 57 21	15° 4'18	18°16	22° 9	13°51	11°49	9°27	13° 5	12° 2	14°59	23°36	4° 4	4°42	8°22	10° 0	W 6	
T 7	17 1 18	16° 1'39	3 ^{III} 30	24°16	15° 3	12°33	9°20	13° 0	12° 1	14°58	23°38	3°54	4°39	8°28	9°59	T 7	
F 8	17 5 15	16°58'59	18°27	26°22	16°15	13°17	9°12	12°56	12° 0	14°56	23°39	3°46	4°36	8°35	9°57	F 8	
S 9	17 9 11	17°56'19	3 ^{II} 1	28°26	17°27	14° 0	9° 5	12°51	11°59	14°55	23°41	3°41	4°32	8°42	9°56	S 9	
S 10	17 13 8	18°53'37	17° 6	0 ^{III} 28	18°39	14°44	8°57	12°47	11°58	14°54	23°42	3°38	4°29	8°48	9°54	S 10	
M11	17 17 4	19°50'55	0 ^{III} 43	2°28	19°51	15°27	8°50	12°43	11°57	14°52	23°43	3°D37	4°26	8°55	9°52	M11	
T 12	17 21 1	20°48'11	13°53	4°26	21° 3	16°11	8°42	12°38	11°56	14°51	23°45	3°37	4°23	9° 2	9°50	T 12	
W13	17 24 57	21°45'27	26°39	6°23	22°15	16°54	8°35	12°34	11°55	14°49	23°46	3°R37	4°20	9° 9	9°49	W13	
T 14	17 28 54	22°42'42	9 ^{II} 6	8°16	23°27	17°38	8°28	12°30	11°53	14°48	23°48	3°36	4°17	9°15	9°47	T 14	
F 15	17 32 51	23°39'57	21°19	10° 8	24°39	18°21	8°21	12°25	11°52	14°46	23°49	3°33	4°13	9°22	9°45	F 15	
S 16	17 36 47	24°37'10	3 ^{III} 22	11°57	25°51	19° 4	8°13	12°21	11°51	14°45	23°51	3°27	4°10	9°29	9°43	S 16	
S 17	17 40 44	25°34'23	15°18	13°45	27° 2	19°47	8° 6	12°17	11°49	14°43	23°52	3°19	4° 7	9°35	9°41	S 17	
M18	17 44 40	26°31'36	27°11	15°29	28°14	20°30	7°59	12°12	11°48	14°42	23°54	3° 9	4° 4	9°42	9°39	M18	
T 19	17 48 37	27°28'48	9 ^{III} 3	17°12	29°26	21°13	7°53	12° 8	11°46	14°40	23°55	2°57	4° 1	9°49	9°37	T 19	
W20	17 52 33	28°25'59	20°57	18°52	0 ^{III} 37	21°56	7°46	12° 4	11°45	14°39	23°56	2°45	3°57	9°56	9°35	W20	
T 21	17 56 30	29°23'11	2 ^{III} 53	20°30	1°49	22°39	7°39	12° 0	11°43	14°37	23°58	2°34	3°54	10° 2	9°32	T 21	
F 22	18 0 26	0 ^{III} 20'22	14°53	22° 6	3° 0	23°22	7°33	11°56	11°42	14°36	23°59	2°24	3°51	10° 9	9°30	F 22	
S 23	18 4 23	1°17'33	26°59	23°39	4°12	24° 5	7°26	11°52	11°40	14°34	24° 1	2°17	3°48	10°16	9°28	S 23	
S 24	18 8 20	2°14'43	9 ^{III} 12	25°10	5°23	24°47	7°20	11°48	11°38	14°33	24° 2	2°12	3°45	10°23	9°25	S 24	
M25	18 12 16	3°11'54	21°35	26°38	6°34	25°30	7°14	11°44	11°37	14°31	24° 4	2° 9	3°42	10°29	9°23	M25	
T 26	18 16 13	4° 9'05	4 ^{III} 11	28° 4	7°45	26°13	7° 7	11°40	11°35	14°30	24° 5	2°D 9	3°38	10°36	9°21	T 26	
W27	18 20 9	5° 6'16	17° 2	29°28	8°57	26°55	7° 1	11°36	11°33	14°28	24° 6	2° 9	3°35	10°43	9°18	W27	
T 28	18 24 6	6° 3'27	0 ^{III} 12	0 ^{III} 49	10° 8	27°38	6°55	11°32	11°32	14°26	24° 8	2°R10	3°32	10°49	9°15	T 28	
F 29	18 28 2	7° 0'38	13°45	2° 8	11°19	28°20	6°50	11°28	11°30	14°25	24° 9	2°10	3°29	10°56	9°13	F 29	
S 30	18 31 59	7 ^{III} 57'50	27°14'1	3 ^{II} 24	12 ^{II} 30	29°III 2	6 ^{III} 44	11 ^{III} 25	11 ^{III} 28	14 ^{III} 23	24 ^{II} 11	2 ^{III} 8	3 ^{III} 26	11 ^{III} 3	9 ^{III} 10	S 30	

Day	☉	☾		♊		♋		♌		♍		♎		♏		♐		♑		♒		♓		♈	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
F 1	22n 2	0s37	2s29	22n59	0n49	24n47	1n32	13n39	0s38	21s16	0n44	20s46	1n42	17s50	0s40	21s52	0n45	16n53	6s27	9n48	9n42	16s34	10s53	7n 7	
S 2	22 10	3n57	3 28	23 25	0 58	24 43	1 33	13 54	0 37	21 15	0 44	20 46	1 42	17 50	0 40	21 53	0 45	16 53	6 27	9 49	9 44	16 36	10 53	7 8	
S 3	22 18	8 27	4 16	23 49	1 7	24 40	1 35	14 9	0 36	21 14	0 44	20 45	1 42	17 50	0 40	21 53	0 45	16 53	6 27	9 51	9 45	16 37	10 52	7 8	
M 4	22 25	12 32	4 48	24 10	1 15	24 35	1 36	14 23	0 36	21 13	0 44	20 45	1 42	17 51	0 40	21 53	0 45	16 53	6 27	9 55	9 46	16 38	10 52	7 8	
T 5	22 32	15 52	5 1	24 29	1 23	24 30	1 38	14 37	0 35	21 12	0 44	20 44	1 42	17 51	0 40	21 53	0 45	16 53	6 27	9 58	9 47	16 39	10 52	7 9	
W 6	22 39	18 7	4 52	24 44	1 30	24 24	1 39	14 52	0 35	21 11	0 44	20 44	1 42	17 51	0 40	21 53	0 45	16 53	6 27	10 2	9 48	16 40	10 52	7 9	
T 7	22 45	19 4	4 22	24 57	1 36	24 17	1 40	15 5	0 34	21 10	0 44	20 43	1 42	17 52	0 40	21 53	0 45	16 53	6 27	10 6	9 49	16 41	10 52	7 10	
F 8	22 51	18 40	3 35	25 7	1 42	24 10	1 41	15 19	0 33	21 9	0 43	20 43	1 41	17 52	0 40	21 53	0 45	16 53	6 27	10 9	9 51	16 42	10 52	7 10	
S 9	22 56	17 1	2 35	25 15	1 46	24 2	1 42	15 33	0 33	21 8	0 43	20 42	1 41	17 52	0 40	21 54	0 45	16 54	6 27	10 10	9 52	16 43	10 52	7 10	
S 10	23 1	14 22	1 26	25 19	1 50	23 53	1 43	15 46	0 32	21 7	0 43	20 42	1 41	17 53	0 40	21 54	0 45	16 54	6 27	10 11	9 53	16 44	10 52	7 11	
M11	23 5	11 0	0 15	25 21	1 54	23 44	1 44	16 0	0 31	21 6	0 43	20 41	1 41	17 53	0 40	21 54	0 45	16 54	6 26	10 12	9 54	16 45	10 52	7 11	
T 12	23 10	7 11	0n54	25 21	1 56	23 34	1 45	16 13	0 31	21 5	0 43	20 41	1 41	17 53	0 40	21 54	0 45	16 54	6 26	10 12	9 55	16 46	10 53	7 12	
W13	23 13	3 9	1 59	25 18	1 58	23 23	1 46	16 26	0 30	21 4	0 43	20 40	1 41	17 54	0 40	21 54	0 45	16 54	6 26	10 12	9 56	16 47	10 53	7 12	
T 14	23 17	0s55	2 57	25 12	1 59	23 11	1 47	16 39	0 30	21 3	0 43	20 40	1 41	17 54	0 40	21 54	0 45	16 54	6 26	10 12	9 58	16 48	10 53	7 12	
F 15	23 20	4 51	3 45	25 5	2 0	22 59	1 47	16 51	0 29	21 2	0 42	20 39	1 41	17 54	0 40	21 55	0 45	16 54	6 26	10 13	9 59	16 50	10 53	7 13	
S 16	23 22	8 33	4 22	24 56	1 59	22 47	1 48	17 4	0 28	21 1	0 42	20 39	1 41	17 55	0 40	21 55	0 45	16 54	6 26	10 15	10 0	16 51	10 53	7 13	
S 17	23 24	11 52	4 48	24 44	1 58	22 33	1 48	17 16	0 28	21 0	0 42	20 39	1 41	17 55	0 40	21 55	0 45	16 55	6 26	10 18	10 1	16 52	10 53	7 13	
M18	23 26	14 41	5 1	24 31	1 57	22 19	1 49	17 28	0 27	20 59	0 42	20 38	1 40	17 56	0 40	21 55	0 45	16 55	6 26	10 22	10 2	16 53	10 54	7 14	
T 19	23 27	16 54	5 1	24 16	1 54	22 5	1 49	17 40	0 26	20 58	0 42	20 38	1 40	17 56	0 41	21 55	0 45	16 55	6 26	10 26	10 3	16 54	10 54	7 14	
W20	23 28	18 23	4 47	23 59	1 51	21 50	1 49	17 52	0 26	20 58	0 42	20 37	1 40	17 57	0 41	21 55	0 45	16 55	6 26	10 31	10 4	16 55	10 54	7 14	
T 21	23 29	19 5	4 22	23 41	1 48	21 34	1 49	18 4	0 25	20 57	0 41	20 37	1 40	17 57	0 41	21 56	0 45	16 55	6 26	10 35	10 6	16 56	10 54	7 15	
F 22	23 29	18 56	3 44	23 22	1 43	21 18	1 49	18 15	0 24	20 56	0 41	20 36	1 40	17 57	0 41	21 56	0 45	16 55	6 26	10 38	10 7	16 57	10 55	7 15	
S 23	23 28	17 55	2 56	23 1	1 38	21 1	1 49	18 27	0 24	20 55	0 41	20 36	1 40	17 58	0 41	21 56	0 45	16 55	6 26	10 41	10 8	16 58	10 55	7 15	
S 24	23 28	16 4	1 59	22 39	1 33	20 43	1 49	18 38	0 23	20 54	0 41	20 36	1 40	17 58	0 41	21 56	0 45	16 55	6 26	10 43	10 9	16 59	10 55	7 16	
M25	23 27	13 27	0 56	22 17	1 26	20 25	1 49	18 49	0 22	20 53	0 41	20 35	1 40	17 59	0 41	21 56	0 45	16 55	6 26	10 44	10 10	17 0	10 55	7 16	
T 26	23 25	10 10	0s11	21 53	1 20	20 7	1 49	18 59	0 22	20 52	0 40	20 35	1 39	17 59	0 41	21 56	0 45	16 55	6 26	10 44	10 11	17 1	10 56	7 16	
W27	23 23	6 20	1 19	21 29	1 12	19 48	1 49	19 10	0 21	20 52	0 40	20 34	1 39	18 0	0 41	21 57	0 45	16 55	6 26	10 43	10 13	17 2	10 56	7 16	
T 28	23 20	2 8	2 25	21 4	1 5	19 28	1 48	19 20	0 20	20 51	0 40	20 34	1 39	18 0	0 41	21 57	0 45	16 56	6 26	10 43	10 14	17 3	10 57	7 17	
F 29	23 18	2n18	3 24	20 38	0 56	19 8	1 48	19 30	0 19	20 50	0 40	20 34	1 39	18 1	0 41	21 57	0 45	16 56	6 26	10 44	10 15	17 4	10 57	7 17	
S 30	23n14	6n44	4s13	20n12	0n47	18n48	1n47	19n40	0s19	20s49	0n40	20s33	1n39	18s 2	0s41	21s57	0n45	16n56	6s26	10n44	10n16	17s 5	10s57	7n17	

ASTRODIENST EPHEMERIS for the year 1663

geocentric

JULY 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	18 35 55	8°55'02	12°8' 1	4°38	13°41	29°45	6°R39	11°R21	11°R26	14°R22	24°II12	2°R 5	3°II22	11°A10	9°R 8	S 1
M 2	18 39 52	9°52'14	26°44	5°49	14°52	0°II27	6°A33	11°A17	11°A24	14°A20	24°13	1°II59	3°19	11°16	9°A 5	M 2
T 3	18 43 49	10°49'27	11°II42	6°57	16° 3	1° 9	6°28	11°14	11°22	14°18	24°15	1°52	3°16	11°23	9° 2	T 3
W 4	18 47 45	11°46'40	26°49	8° 2	17°14	1°51	6°23	11°10	11°20	14°17	24°16	1°45	3°13	11°30	8°59	W 4
T 5	18 51 42	12°43'54	11°A54	9° 5	18°24	2°33	6°18	11° 7	11°18	14°15	24°18	1°38	3°10	11°37	8°56	T 5
F 6	18 55 38	13°41'07	26°47	10° 4	19°35	3°15	6°13	11° 4	11°16	14°13	24°19	1°32	3° 7	11°43	8°54	F 6
S 7	18 59 35	14°38'21	11°II21	11° 1	20°46	3°57	6° 9	11° 0	11°14	14°12	24°20	1°28	3° 3	11°50	8°51	S 7
S 8	19 3 31	15°35'34	25°30	11°54	21°56	4°39	6° 4	10°57	11°12	14°10	24°22	1°D27	3° 0	11°57	8°48	S 8
M 9	19 7 28	16°32'48	9°II12	12°44	23° 7	5°20	6° 0	10°54	11°10	14° 9	24°23	1°27	2°57	12° 3	8°45	M 9
T 10	19 11 24	17°30'02	22°27	13°31	24°17	6° 2	5°56	10°51	11° 8	14° 7	24°24	1°28	2°54	12°10	8°42	T 10
W11	19 15 21	18°27'16	5°A17	14°14	25°28	6°44	5°52	10°48	11° 6	14° 5	24°26	1°29	2°51	12°17	8°39	W11
T 12	19 19 18	19°24'30	17°47	14°53	26°38	7°25	5°48	10°45	11° 4	14° 4	24°27	1°R30	2°48	12°24	8°36	T 12
F 13	19 23 14	20°21'44	0°II 1	15°28	27°48	8° 7	5°44	10°42	11° 1	14° 2	24°28	1°30	2°44	12°30	8°33	F 13
S 14	19 27 11	21°18'58	12° 3	16° 0	28°58	8°48	5°41	10°39	10°59	14° 1	24°30	1°27	2°41	12°37	8°30	S 14
S 15	19 31 7	22°16'13	23°59	16°27	0°II 8	9°29	5°37	10°36	10°57	13°59	24°31	1°24	2°38	12°44	8°26	S 15
M16	19 35 4	23°13'28	5°A51	16°49	1°18	10°10	5°34	10°34	10°55	13°57	24°32	1°18	2°35	12°50	8°23	M16
T 17	19 39 0	24°10'43	17°44	17° 8	2°28	10°52	5°31	10°31	10°53	13°56	24°33	1°12	2°32	12°57	8°20	T 17
W18	19 42 57	25° 7'59	29°40	17°21	3°38	11°33	5°28	10°28	10°50	13°54	24°35	1° 6	2°28	13° 4	8°17	W18
T 19	19 46 53	26° 5'15	11°A42	17°30	4°48	12°14	5°26	10°26	10°48	13°53	24°36	0°59	2°25	13°11	8°14	T 19
F 20	19 50 50	27° 2'32	23°51	17°R34	5°57	12°55	5°23	10°24	10°46	13°51	24°37	0°54	2°22	13°17	8°11	F 20
S 21	19 54 47	27°59'49	6°A 8	17°33	7° 7	13°36	5°21	10°21	10°43	13°49	24°39	0°50	2°19	13°24	8° 7	S 21
S 22	19 58 43	28°57'07	18°36	17°27	8°16	14°16	5°19	10°19	10°41	13°48	24°40	0°48	2°16	13°31	8° 4	S 22
M23	20 2 40	29°54'26	1°II 14	17°16	9°26	14°57	5°17	10°17	10°39	13°46	24°41	0°D48	2°13	13°38	8° 1	M23
T 24	20 6 36	0°II51'46	14° 5	17° 0	10°35	15°38	5°15	10°15	10°36	13°45	24°42	0°48	2° 9	13°44	7°58	T 24
W25	20 10 33	1°49'07	27° 9	16°39	11°44	16°18	5°14	10°13	10°34	13°43	24°43	0°50	2° 6	13°51	7°54	W25
T 26	20 14 29	2°46'28	10°V29	16°13	12°53	16°59	5°12	10°11	10°32	13°42	24°45	0°51	2° 3	13°58	7°51	T 26
F 27	20 18 26	3°43'51	24° 5	15°42	14° 2	17°39	5°11	10°10	10°29	13°40	24°46	0°52	2° 0	14° 4	7°48	F 27
S 28	20 22 22	4°41'15	7°A58	15° 8	15°11	18°20	5°10	10° 8	10°27	13°39	24°47	0°R52	1°57	14°11	7°45	S 28
S 29	20 26 19	5°38'41	22° 9	14°30	16°20	19° 0	5° 9	10° 6	10°25	13°37	24°48	0°52	1°54	14°18	7°41	S 29
M30	20 30 16	6°36'07	6°II34	13°48	17°29	19°40	5° 9	10° 5	10°22	13°36	24°49	0°50	1°50	14°25	7°38	M30
T 31	20 34 12	7°II33'35	21°II12	13°II 4	18°II37	20°II20	5°A 8	10°A 3	10°A20	13°A34	24°II50	0°II47	1°II47	14°A31	7°A35	T 31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	
S 1	23n11	10n54	4s48	19n45	0n38	18n27	1n46	19n50	0s18	20s48	0n39	20s33	1n39	18s 2	0s41	21s57
M 2	23 7	14 30	5 5	19 19	0 28	18 5	1 46	20 0	0 17	20 48	0 39	20 33	1 39	18 3	0 41	21 57
T 3	23 2	17 14	5 2	18 52	0 18	17 43	1 45	20 9	0 17	20 47	0 39	20 32	1 38	18 3	0 41	21 58
W 4	22 57	18 49	4 38	18 25	0 7	17 21	1 44	20 19	0 16	20 46	0 39	20 32	1 38	18 4	0 41	21 58
T 5	22 52	19 3	3 55	17 57	0s 4	16 58	1 43	20 28	0 15	20 46	0 39	20 32	1 38	18 4	0 41	21 58
F 6	22 47	17 58	2 56	17 31	0 15	16 35	1 42	20 36	0 14	20 45	0 38	20 31	1 38	18 5	0 41	21 58
S 7	22 40	15 42	1 46	17 4	0 27	16 11	1 40	20 45	0 14	20 45	0 38	20 31	1 38	18 5	0 41	21 58
S 8	22 34	12 32	0 32	16 37	0 39	15 47	1 39	20 53	0 13	20 44	0 38	20 31	1 38	18 6	0 41	21 59
M 9	22 27	8 47	0n42	16 11	0 52	15 22	1 38	21 2	0 12	20 43	0 38	20 31	1 37	18 7	0 41	21 59
T 10	22 20	4 42	1 51	15 46	1 5	14 58	1 36	21 10	0 11	20 43	0 38	20 30	1 37	18 7	0 41	21 59
W11	22 12	0 32	2 53	15 21	1 18	14 32	1 35	21 18	0 11	20 42	0 37	20 30	1 37	18 8	0 41	21 59
T 12	22 4	3s32	3 44	14 57	1 31	14 7	1 33	21 25	0 10	20 42	0 37	20 30	1 37	18 8	0 41	21 59
F 13	21 56	7 22	4 25	14 34	1 45	13 41	1 31	21 33	0 9	20 41	0 37	20 30	1 37	18 9	0 41	21 59
S 14	21 47	10 50	4 53	14 11	1 58	13 15	1 29	21 40	0 8	20 41	0 37	20 29	1 37	18 10	0 41	22 0
S 15	21 38	13 50	5 7	13 50	2 12	12 48	1 27	21 47	0 8	20 41	0 37	20 29	1 36	18 10	0 41	22 0
M16	21 29	16 15	5 9	13 30	2 26	12 21	1 25	21 54	0 7	20 40	0 36	20 29	1 36	18 11	0 41	22 0
T 17	21 19	17 59	4 57	13 12	2 40	11 54	1 23	22 1	0 6	20 40	0 36	20 29	1 36	18 12	0 41	22 0
W18	21 9	18 56	4 33	12 54	2 53	11 27	1 21	22 7	0 5	20 40	0 36	20 29	1 36	18 12	0 41	22 0
T 19	20 58	19 3	3 56	12 39	3 7	10 59	1 19	22 13	0 5	20 39	0 36	20 28	1 36	18 13	0 41	22 1
F 20	20 47	18 17	3 8	12 25	3 20	10 31	1 16	22 19	0 4	20 39	0 36	20 28	1 35	18 14	0 41	22 1
S 21	20 36	16 40	2 11	12 13	3 33	10 3	1 14	22 25	0 3	20 39	0 35	20 28	1 35	18 14	0 41	22 1
S 22	20 24	14 14	1 6	12 3	3 45	9 35	1 11	22 31	0 2	20 39	0 35	20 28	1 35	18 15	0 41	22 1
M23	20 12	11 6	0s 2	11 55	3 57	9 6	1 8	22 36	0 2	20 39	0 35	20 28	1 35	18 15	0 41	22 1
T 24	20 0	7 23	1 12	11 50	4 8	8 37	1 6	22 42	0 1	20 39	0 35	20 28	1 35	18 16	0 41	22 1
W25	19 47	3 16	2 19	11 46	4 18	8 8	1 3	22 47	0n 0	20 39	0 35	20 28	1 34	18 17	0 41	22 2
T 26	19 34	1n 5	3 21	11 45	4 27	7 39	1 0	22 51	0 1	20 39	0 34	20 28	1 34	18 17	0 41	22 2
F 27	19 21	5 27	4 12	11 46	4 35	7 10	0 57	22 56	0 2	20 39	0 34	20 28	1 34	18 18	0 41	22 2
S 28	19 7	9 37	4 49	11 50	4 42	6 40	0 54	23 0	0 2	20 39	0 34	20 28	1 34	18 19	0 41	22 2
S 29	18 54	13 20	5 10	11 55	4 47	6 11	0 50	23 5	0 3	20 39	0 34	20 28	1 34	18 19	0 41	22 2
M30	18 39	16 19	5 12	12 4	4 51	5 41	0 47	23 9	0 4	20 39	0 33	20 27	1 33	18 20	0 41	22 2
T 31	18n25	18n17	4s54	12n14	4s53	5n11	0n44	23n13	0n 5	20s39	0n33	20s27	1n33	18s21	0s41	22s 3

Julian Day Number = 2328639.5, Delta T = 34.02 sec
 Ecliptic obliquity = 23°28'50, Nutation = - 0°00'08, out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°02'36, Lahiri = 19°09'36Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1663
geocentric

AUGUST 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
W 1	20 38 9	8♂31'05	5♂55	12°R18	19♂46	21♂1	5°R 8	10°R 2	10°R17	13°R33	24♂51	0°R44	1♂44	14♂38	7°R31	W 1
T 2	20 42 5	9°28'35	20°39	11♂31	20°54	21°41	5°D 8	10♂1	10♂15	13♂31	24°52	0♂41	1°41	14°45	7♂28	T 2
F 3	20 46 2	10°26'06	5♂14	10°44	22°3	22°21	5♂8	10°0	10°13	13°30	24°53	0°39	1°38	14°51	7°25	F 3
S 4	20 49 58	11°23'39	19°35	9°57	23°11	23°0	5°8	9°59	10°10	13°29	24°55	0°38	1°34	14°58	7°21	S 4
S 5	20 53 55	12°21'13	3♂37	9°12	24°19	23°40	5°9	9°58	10°8	13°27	24°56	0°D38	1°31	15°5	7°18	S 5
M 6	20 57 51	13°18'47	17°16	8°29	25°27	24°20	5°10	9°57	10°6	13°26	24°57	0°38	1°28	15°12	7°15	M 6
T 7	21 1 48	14°16'23	0♂32	7°49	26°35	24°59	5°10	9°56	10°3	13°25	24°58	0°39	1°25	15°18	7°12	T 7
W 8	21 5 45	15°13'59	13°25	7°14	27°43	25°39	5°12	9°56	10°1	13°23	24°59	0°41	1°22	15°25	7°8	W 8
T 9	21 9 41	16°11'37	25°58	6°43	28°50	26°18	5°13	9°55	9°58	13°22	25°0	0°42	1°19	15°32	7°5	T 9
F 10	21 13 38	17°9'15	8♂14	6°18	29°58	26°58	5°14	9°55	9°56	13°21	25°1	0°43	1°15	15°38	7°2	F 10
S 11	21 17 34	18°6'55	20°18	5°59	1♂5	27°37	5°16	9°54	9°54	13°19	25°1	0°R43	1°12	15°45	6°59	S 11
S 12	21 21 31	19°4'36	2♂14	5°46	2°13	28°16	5°18	9°54	9°51	13°18	25°2	0°42	1°9	15°52	6°56	S 12
M13	21 25 27	20°2'17	14°7	5°D41	3°20	28°55	5°20	9°54	9°49	13°17	25°3	0°41	1°6	15°59	6°52	M13
T 14	21 29 24	21°0'00	26°1	5°42	4°27	29°35	5°22	9°D54	9°47	13°16	25°4	0°40	1°3	16°5	6°49	T 14
W15	21 33 20	21°57'44	8♂0	5°51	5°33	0♂13	5°24	9°54	9°44	13°15	25°5	0°39	1°0	16°12	6°46	W15
T 16	21 37 17	22°55'29	20°8	6°8	6°40	0°52	5°26	9°54	9°42	13°13	25°6	0°38	0°56	16°19	6°43	T 16
F 17	21 41 14	23°53'16	2♂25	6°32	7°46	1°31	5°29	9°54	9°40	13°12	25°7	0°37	0°53	16°26	6°40	F 17
S 18	21 45 10	24°51'04	14°56	7°4	8°53	2°10	5°32	9°54	9°37	13°11	25°8	0°37	0°50	16°32	6°37	S 18
S 19	21 49 7	25°48'53	27°41	7°44	9°59	2°49	5°35	9°55	9°35	13°10	25°8	0°D36	0°47	16°39	6°34	S 19
M20	21 53 3	26°46'44	10♂40	8°31	11°5	3°27	5°38	9°55	9°33	13°9	25°9	0°36	0°44	16°46	6°31	M20
T 21	21 57 0	27°44'36	23°53	9°25	12°11	4°6	5°42	9°56	9°31	13°8	25°10	0°37	0°40	16°52	6°28	T 21
W22	22 0 56	28°42'30	7°Y19	10°26	13°17	4°44	5°45	9°57	9°28	13°7	25°11	0°37	0°37	16°59	6°25	W22
T 23	22 4 53	29°40'25	20°58	11°34	14°22	5°22	5°49	9°57	9°26	13°6	25°11	0°37	0°34	17°6	6°22	T 23
F 24	22 8 49	0♂38'23	4♂49	12°48	15°27	6°1	5°53	9°58	9°24	13°5	25°12	0°R37	0°31	17°13	6°19	F 24
S 25	22 12 46	1°36'22	18°49	14°8	16°32	6°39	5°57	9°59	9°22	13°4	25°13	0°37	0°28	17°19	6°16	S 25
S 26	22 16 43	2°34'24	2♂58	15°33	17°37	7°17	6°1	10°0	9°20	13°3	25°13	0°D37	0°25	17°26	6°13	S 26
M27	22 20 39	3°32'27	17°13	17°4	18°42	7°55	6°5	10°2	9°18	13°2	25°14	0°37	0°21	17°33	6°11	M27
T 28	22 24 36	4°30'32	1♂31	18°39	19°47	8°33	6°10	10°3	9°15	13°1	25°15	0°37	0°18	17°39	6°8	T 28
W29	22 28 32	5°28'40	15°50	20°17	20°51	9°10	6°15	10°4	9°13	13°1	25°15	0°38	0°15	17°46	6°5	W29
T 30	22 32 29	6°26'49	0♂6	22°0	21°55	9°48	6°20	10°6	9°11	13°0	25°16	0°38	0°12	17°53	6°2	T 30
F 31	22 36 25	7♂25'00	14♂14	23♂45	22♂59	10♂26	6♂25	10♂7	9♂9	12♂59	25♂17	0♂39	0♂9	18♂0	6♂0	F 31

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat
W 1	18n10	19n 4	4s17	12n26	4s54	4n41	0n40	23n16	0n 6	20s39	0n33	20s28	1n33	18s21	0s41	22s 3
T 2	17 55	18 33	3 23	12 40	4 52	4 11	0 37	23 20	0 7	20 39	0 33	20 28	1 33	18 22	0 41	22 3
F 3	17 39	16 48	2 15	12 56	4 49	3 40	0 33	23 23	0 7	20 39	0 33	20 28	1 33	18 23	0 41	22 3
S 4	17 23	14 1	1 1	13 14	4 44	3 10	0 30	23 26	0 8	20 40	0 32	20 28	1 32	18 23	0 41	22 3
S 5	17 7	10 27	0n16	13 32	4 37	2 39	0 26	23 29	0 9	20 40	0 32	20 28	1 32	18 24	0 41	22 3
M 6	16 51	6 26	1 31	13 52	4 28	2 9	0 22	23 31	0 10	20 40	0 32	20 28	1 32	18 25	0 41	22 4
T 7	16 35	2 12	2 38	14 12	4 18	1 38	0 18	23 34	0 11	20 41	0 32	20 28	1 32	18 25	0 41	22 4
W 8	16 18	2s 0	3 35	14 32	4 6	1 8	0 14	23 36	0 11	20 41	0 32	20 28	1 32	18 26	0 41	22 4
T 9	16 1	6 0	4 20	14 52	3 53	0 37	0 10	23 38	0 12	20 42	0 31	20 28	1 31	18 27	0 41	22 4
F 10	15 43	9 39	4 52	15 12	3 38	0 6	0 6	23 40	0 13	20 42	0 31	20 28	1 31	18 27	0 41	22 4
S 11	15 26	12 51	5 11	15 32	3 23	0s24	0 2	23 42	0 14	20 42	0 31	20 28	1 31	18 28	0 41	22 4
S 12	15 8	15 29	5 16	15 51	3 7	0 55	0s 2	23 43	0 15	20 43	0 31	20 29	1 31	18 28	0 41	22 5
M13	14 50	17 26	5 8	16 8	2 50	1 26	0 7	23 44	0 16	20 44	0 31	20 29	1 31	18 29	0 41	22 5
T 14	14 31	18 39	4 46	16 25	2 33	1 56	0 11	23 45	0 17	20 44	0 30	20 29	1 30	18 30	0 41	22 5
W15	14 13	19 3	4 12	16 39	2 15	2 27	0 16	23 46	0 17	20 45	0 30	20 29	1 30	18 30	0 41	22 5
T 16	13 54	18 34	3 26	16 53	1 57	2 58	0 20	23 47	0 18	20 45	0 30	20 29	1 30	18 31	0 41	22 5
F 17	13 35	17 13	2 30	17 4	1 40	3 28	0 25	23 47	0 19	20 46	0 30	20 30	1 30	18 32	0 41	22 5
S 18	13 16	15 1	1 26	17 12	1 22	3 59	0 29	23 48	0 20	20 47	0 30	20 30	1 30	18 32	0 41	22 5
S 19	12 56	12 3	0 16	17 19	1 5	4 29	0 34	23 48	0 21	20 48	0 29	20 30	1 29	18 33	0 41	22 6
M20	12 37	8 26	0s55	17 23	0 48	4 59	0 39	23 48	0 22	20 48	0 29	20 30	1 29	18 33	0 41	22 6
T 21	12 17	4 21	2 6	17 25	0 32	5 29	0 44	23 48	0 23	20 49	0 29	20 31	1 29	18 34	0 41	22 6
W22	11 57	0n 0	3 10	17 23	0 17	6 0	0 48	23 47	0 24	20 50	0 29	20 31	1 29	18 35	0 41	22 6
T 23	11 36	4 25	4 4	17 19	0 2	6 30	0 53	23 47	0 24	20 51	0 29	20 31	1 28	18 35	0 41	22 6
F 24	11 16	8 40	4 46	17 12	0n12	6 59	0 58	23 46	0 25	20 52	0 28	20 32	1 28	18 36	0 41	22 6
S 25	10 55	12 28	5 10	17 1	0 25	7 29	1 3	23 45	0 26	20 52	0 28	20 32	1 28	18 36	0 41	22 6
S 26	10 35	15 36	5 17	16 48	0 38	7 59	1 8	23 44	0 27	20 53	0 28	20 32	1 28	18 37	0 41	22 6
M27	10 14	17 49	5 4	16 32	0 49	8 28	1 13	23 43	0 28	20 54	0 28	20 33	1 28	18 37	0 41	22 7
T 28	9 52	18 56	4 32	16 12	0 59	8 57	1 18	23 41	0 29	20 55	0 28	20 33	1 27	18 38	0 41	22 7
W29	9 31	18 50	3 44	15 50	1 8	9 27	1 24	23 40	0 30	20 56	0 27	20 34	1 27	18 39	0 41	22 7
T 30	9 10	17 32	2 41	15 25	1 17	9 56	1 29	23 38	0 31	20 57	0 27	20 34	1 27	18 39	0 41	22 7
F 31	8n48	15n 9	1s30	14n57	1n24	10s24	1s34	23n36	0n32	20s58	0n27	20s35	1n27	18s40	0s41	22s 7

Julian Day Number = 2328670.5, Delta T = 33.96 sec
Ecliptic obliquity = 23°28'51", Nutation = - 0°00'07", out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°02'40", Lahiri = 19°09'41Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1663

geocentric

SEPTEMBER 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	22 40 22	8 ^h 23'13"	28 ^h 12'	25 ^h 33'	24 ^h 3	11 ^h 3	6 ^h 30'	10 ^h 9'	9 ^h R 7	12 ^h R58	25 ^h 17'	0 ^h R39	0 ^h 6	18 ^h 7	5 ^h R57	S 1
S 2	22 44 18	9°21'28"	11 ^h 56'	27°23'	25° 6'	11°41'	6°35'	10°11'	9 ^h 5	12 ^h 357	25°18'	0 ^h 39	0° 2	18°13'	5 ^h 55	S 2
M 3	22 48 15	10°19'44"	25°23'	29°14'	26°10'	12°18'	6°41'	10°13'	9° 3	12°57'	25°18'	0°38'	29 ^h 59	18°20'	5°52'	M 3
T 4	22 52 11	11°18'02"	8 ^h 31'	1 ^h 7	27°13'	12°55'	6°46'	10°14'	9° 1	12°56'	25°19'	0°37'	29°56'	18°26'	5°50'	T 4
W 5	22 56 8	12°16'22"	21°21'	3° 1	28°15'	13°32'	6°52'	10°17'	9° 0	12°55'	25°19'	0°35'	29°53'	18°33'	5°47'	W 5
T 6	23 0 5	13°14'44"	3 ^h 53'	4°55'	29°18'	14° 9'	6°58'	10°19'	8°58'	12°55'	25°20'	0°34'	29°50'	18°40'	5°45'	T 6
F 7	23 4 1	14°13'07"	16°10'	6°49'	0 ^h 20'	14°46'	7° 5	10°21'	8°56'	12°54'	25°20'	0°32'	29°46'	18°47'	5°43'	F 7
S 8	23 7 58	15°11'32"	28°14'	8°44'	1°22'	15°23'	7°11'	10°23'	8°54'	12°54'	25°20'	0°31'	29°43'	18°53'	5°40'	S 8
S 9	23 11 54	16° 9'58"	10 ^h 11'	10°38'	2°24'	16° 0'	7°17'	10°26'	8°52'	12°53'	25°21'	0°30'	29°40'	19° 0'	5°38'	S 9
M10	23 15 51	17° 8'26"	22° 4	12°32'	3°25'	16°36'	7°24'	10°28'	8°51'	12°53'	25°21'	0°D30	29°37'	19° 7	5°36'	M10
T 11	23 19 47	18° 6'56"	3 ^h 58'	14°25'	4°26'	17°13'	7°31'	10°31'	8°49'	12°52'	25°21'	0°31'	29°34'	19°13'	5°34'	T 11
W12	23 23 44	19° 5'28"	15°57'	16°18'	5°27'	17°49'	7°38'	10°33'	8°47'	12°52'	25°22'	0°32'	29°31'	19°20'	5°32'	W12
T 13	23 27 40	20° 4'01"	28° 7	18°10'	6°27'	18°26'	7°45'	10°36'	8°46'	12°51'	25°22'	0°34'	29°27'	19°27'	5°30'	T 13
F 14	23 31 37	21° 2'36"	10 ^h 31'	20° 2	7°27'	19° 2	7°52'	10°39'	8°44'	12°51'	25°22'	0°35'	29°24'	19°34'	5°28'	F 14
S 15	23 35 34	22° 1'12"	23°12'	21°52'	8°27'	19°38'	7°59'	10°42'	8°43'	12°51'	25°22'	0°36'	29°21'	19°40'	5°26'	S 15
S 16	23 39 30	22°59'50"	6 ^h 11'	23°42'	9°27'	20°14'	8° 7	10°45'	8°41'	12°50'	25°23'	0°R36	29°18'	19°47'	5°24'	S 16
M17	23 43 27	23°58'31"	19°31'	25°30'	10°26'	20°50'	8°14'	10°48'	8°40'	12°50'	25°23'	0°35'	29°15'	19°54'	5°22'	M17
T 18	23 47 23	24°57'13"	3 ^h 9	27°18'	11°24'	21°25'	8°22'	10°51'	8°38'	12°50'	25°23'	0°33'	29°11'	20° 0	5°21'	T 18
W19	23 51 20	25°55'57"	17° 3	29° 5	12°22'	22° 1	8°30'	10°55'	8°37'	12°50'	25°23'	0°29'	29° 8	20° 7	5°19'	W19
T 20	23 55 16	26°54'43"	1 ^h 10'	0 ^h 51'	13°20'	22°37'	8°38'	10°58'	8°35'	12°50'	25°23'	0°26'	29° 5	20°14'	5°17'	T 20
F 21	23 59 13	27°53'32"	15°24'	2°36'	14°17'	23°12'	8°46'	11° 1	8°34'	12°49'	25°23'	0°22'	29° 2	20°21'	5°16'	F 21
S 22	0 3 9	28°52'22"	29°43'	4°20'	15°14'	23°47'	8°54'	11° 5	8°33'	12°49'	25°24'	0°19'	28°59'	20°27'	5°14'	S 22
S 23	0 7 6	29°51'16"	14 ^h 11'	6° 3	16°11'	24°23'	9° 2	11° 8	8°32'	12°49'	25°24'	0°16'	28°56'	20°34'	5°13'	S 23
M24	0 11 3	0 ^h 50'11"	28°16'	7°45'	17° 7	24°58'	9°11'	11°12'	8°30'	12°49'	25°24'	0°D15	28°52'	20°41'	5°12'	M24
T 25	0 14 59	1°49'09"	12 ^h 24'	9°26'	18° 2	25°33'	9°20'	11°16'	8°29'	12°D49	25°R24	0°16'	28°49'	20°47'	5°10'	T 25
W26	0 18 56	2°48'09"	26°24'	11° 6	18°57'	26° 8	9°28'	11°20'	8°28'	12°49'	25°24'	0°17'	28°46'	20°54'	5° 9	W26
T 27	0 22 52	3°47'12"	10 ^h 15'	12°46'	19°52'	26°42'	9°37'	11°24'	8°27'	12°49'	25°24'	0°19'	28°43'	21° 1	5° 8	T 27
F 28	0 26 49	4°46'17"	23°57'	14°24'	20°46'	27°17'	9°46'	11°28'	8°26'	12°49'	25°24'	0°R20	28°40'	21° 8	5° 7	F 28
S 29	0 30 45	5°45'23"	7 ^h 28'	16° 2	21°39'	27°51'	9°55'	11°32'	8°25'	12°50'	25°24'	0°20'	28°37'	21°14'	5° 6	S 29
S 30	0 34 42	6 ^h 44'33"	20 ^h 48'	17 ^h 39'	22 ^h 32'	28 ^h 26'	10 ^h 7	11 ^h 36'	8 ^h 24	12 ^h 350	25 ^h 23	0 ^h 18	28 ^h 33	21 ^h 21	5 ^h 5	S 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	decl lat	
S 1	8n26	11n54	0s14	14n27	1n30	10s53	1s39	23n34	0n33	20s59	0n27	20s35	1n27	18s40	0s41	22s 7
S 2	8 4	8 3	1n 2	13 54	1 36	11 21	1 44	23 31	0 34	21 1	0 27	20 35	1 26	18 41	0 41	22 7
M 3	7 42	3 52	2 13	13 19	1 40	11 49	1 50	23 29	0 34	21 2	0 26	20 36	1 26	18 41	0 41	22 7
T 4	7 20	0s24	3 15	12 42	1 43	12 17	1 55	23 26	0 35	21 3	0 26	20 36	1 26	18 42	0 41	22 7
W 5	6 58	4 33	4 5	12 4	1 46	12 45	2 0	23 24	0 36	21 4	0 26	20 37	1 26	18 42	0 41	22 7
T 6	6 36	8 24	4 42	11 23	1 47	13 12	2 6	23 21	0 37	21 5	0 26	20 37	1 26	18 43	0 41	22 8
F 7	6 13	11 49	5 6	10 42	1 48	13 39	2 11	23 18	0 38	21 6	0 26	20 38	1 25	18 43	0 41	22 8
S 8	5 51	14 40	5 16	9 59	1 48	14 6	2 16	23 14	0 39	21 8	0 26	20 38	1 25	18 43	0 41	22 8
S 9	5 28	16 53	5 11	9 15	1 48	14 33	2 22	23 11	0 40	21 9	0 25	20 39	1 25	18 44	0 41	22 8
M10	5 5	18 21	4 54	8 31	1 47	14 59	2 27	23 8	0 41	21 10	0 25	20 40	1 25	18 44	0 41	22 8
T 11	4 42	19 2	4 24	7 45	1 45	15 25	2 33	23 4	0 42	21 11	0 25	20 40	1 25	18 45	0 41	22 8
W12	4 19	18 51	3 42	6 59	1 43	15 51	2 38	23 0	0 43	21 13	0 25	20 41	1 24	18 45	0 41	22 8
T 13	3 56	17 48	2 50	6 13	1 40	16 16	2 43	22 56	0 44	21 14	0 25	20 41	1 24	18 46	0 41	22 8
F 14	3 33	15 54	1 48	5 26	1 36	16 41	2 49	22 52	0 45	21 15	0 24	20 42	1 24	18 46	0 41	22 8
S 15	3 10	13 10	0 41	4 39	1 33	17 6	2 54	22 48	0 46	21 17	0 24	20 42	1 24	18 46	0 41	22 8
S 16	2 47	9 44	0s31	3 52	1 28	17 30	3 0	22 44	0 47	21 18	0 24	20 43	1 24	18 47	0 41	22 8
M17	2 24	5 43	1 42	3 4	1 24	17 54	3 5	22 39	0 48	21 19	0 24	20 44	1 23	18 47	0 41	22 8
T 18	2 1	1 20	2 49	2 17	1 19	18 17	3 10	22 35	0 49	21 21	0 24	20 44	1 23	18 47	0 41	22 8
W19	1 37	3n12	3 48	1 30	1 14	18 41	3 15	22 30	0 50	21 22	0 24	20 45	1 23	18 48	0 41	22 8
T 20	1 14	7 37	4 33	0 43	1 8	19 3	3 21	22 25	0 51	21 24	0 23	20 46	1 23	18 48	0 41	22 9
F 21	0 50	11 39	5 2	0s 4	1 3	19 26	3 26	22 20	0 52	21 25	0 23	20 46	1 23	18 48	0 41	22 9
S 22	0 27	15 2	5 13	0 51	0 57	19 48	3 31	22 15	0 53	21 26	0 23	20 47	1 22	18 49	0 41	22 9
S 23	0 3	17 29	5 4	1 38	0 51	20 9	3 36	22 10	0 54	21 28	0 23	20 48	1 22	18 49	0 41	22 9
M24	0s20	18 52	4 36	2 24	0 45	20 31	3 41	22 5	0 55	21 29	0 23	20 48	1 22	18 49	0 41	22 9
T 25	0 43	19 3	3 52	3 10	0 38	20 51	3 47	21 59	0 56	21 31	0 23	20 49	1 22	18 50	0 41	22 9
W26	1 7	18 3	2 55	3 55	0 32	21 12	3 52	21 54	0 57	21 32	0 22	20 50	1 22	18 50	0 41	22 9
T 27	1 30	15 59	1 47	4 40	0 25	21 32	3 56	21 48	0 58	21 34	0 22	20 51	1 21	18 50	0 41	22 9
F 28	1 54	13 1	0 35	5 25	0 18	21 51	4 1	21 42	0 59	21 35	0 22	20 51	1 21	18 50	0 41	22 9
S 29	2 17	9 23	0n39	6 9	0 11	22 10	4 6	21 37	1 0	21 37	0 22	20 52	1 21	18 51	0 41	22 9
S 30	2s41	5n19	1n49	6s52	0n 5	22s28	4s11	21n31	1n 1	21s38	0n22	20s53	1n21	18s51	0s41	22s 9

Julian Day Number = 2328701.5, Delta T = 33.90 sec
 Ecliptic obliquity = 23°28'51", Nutation = - 0°00'08", out-of-bounds declination in red
 Ayanamsha: Fagan/Bradley = 20°02'44", Lahiri = 19°09'45Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1663
geocentric

OCTOBER 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
M 1	0 38 38	7♏43'44	3♊55	19♏15	23♏24	29♏0	10♏14	11♏40	8°R23	12♏50	25°R23	0°R14	28♏30	21♏28	5°R 4	M 1
T 2	0 42 35	8°42'57	16°49	20°51	24°15	29°34	10°23	11°45	8♏23	12°50	25♏23	0♏9	28°27	21°34	5♏3	T 2
W 3	0 46 31	9°42'13	29°29	22°25	25° 6	0♏8	10°33	11°49	8°22	12°50	25°23	0° 2	28°24	21°41	5° 2	W 3
T 4	0 50 28	10°41'30	11♏55	23°59	25°57	0°42	10°43	11°53	8°21	12°51	25°23	29♏55	28°21	21°48	5° 1	T 4
F 5	0 54 25	11°40'49	24° 8	25°32	26°46	1°16	10°52	11°58	8°20	12°51	25°23	29°47	28°17	21°55	5° 1	F 5
S 6	0 58 21	12°40'11	6♏11	27° 5	27°35	1°49	11° 2	12° 3	8°20	12°51	25°22	29°41	28°14	22° 1	5° 0	S 6
S 7	1 2 18	13°39'34	18° 6	28°36	28°23	2°22	11°12	12° 7	8°19	12°52	25°22	29°35	28°11	22° 8	5° 0	S 7
M 8	1 6 14	14°38'59	29°57	0♏7	29°10	2°56	11°22	12°12	8°19	12°52	25°22	29°32	28° 8	22°15	4°59	M 8
T 9	1 10 11	15°38'25	11♏49	1°37	29°56	3°29	11°33	12°17	8°18	12°53	25°22	29°D31	28° 5	22°21	4°59	T 9
W10	1 14 7	16°37'54	23°46	3° 7	0♏42	4° 2	11°43	12°22	8°18	12°53	25°21	29°31	28° 2	22°28	4°59	W10
T 11	1 18 4	17°37'24	5♏54	4°36	1°26	4°35	11°53	12°27	8°17	12°54	25°21	29°32	27°58	22°35	4°58	T 11
F 12	1 22 0	18°36'56	18°18	6° 4	2°10	5° 7	12° 4	12°32	8°17	12°54	25°21	29°33	27°55	22°41	4°58	F 12
S 13	1 25 57	19°36'30	1♏2	7°31	2°52	5°40	12°14	12°37	8°17	12°55	25°20	29°R34	27°52	22°48	4°58	S 13
S 14	1 29 54	20°36'06	14° 9	8°57	3°34	6°12	12°25	12°42	8°17	12°55	25°20	29°33	27°49	22°55	4°D58	S 14
M15	1 33 50	21°35'43	27°41	10°23	4°14	6°44	12°36	12°47	8°16	12°56	25°19	29°30	27°46	23° 2	4°58	M15
T 16	1 37 47	22°35'22	11♏39	11°48	4°53	7°16	12°47	12°52	8°16	12°57	25°19	29°24	27°42	23° 8	4°58	T 16
W17	1 41 43	23°35'04	25°58	13°12	5°31	7°48	12°58	12°58	8°16	12°58	25°19	29°17	27°39	23°15	4°58	W17
T 18	1 45 40	24°34'47	10♏33	14°35	6° 8	8°20	13° 9	13° 3	8°D16	12°58	25°18	29° 8	27°36	23°22	4°59	T 18
F 19	1 49 36	25°34'32	25°16	15°58	6°44	8°51	13°20	13° 9	8°16	12°59	25°18	28°59	27°33	23°28	4°59	F 19
S 20	1 53 33	26°34'20	10♏1	17°19	7°18	9°23	13°31	13°14	8°16	13° 0	25°17	28°51	27°30	23°35	4°59	S 20
S 21	1 57 29	27°34'10	24°39	18°40	7°51	9°54	13°43	13°20	8°16	13° 1	25°16	28°45	27°27	23°42	5° 0	S 21
M22	2 1 26	28°34'02	9♏5	19°59	8°22	10°25	13°54	13°25	8°16	13° 2	25°16	28°41	27°23	23°49	5° 0	M22
T 23	2 5 23	29°33'56	23°16	21°17	8°52	10°56	14° 6	13°31	8°17	13° 3	25°15	28°39	27°20	23°55	5° 1	T 23
W24	2 9 19	0♏33'53	7♏10	22°34	9°21	11°26	14°17	13°37	8°17	13° 4	25°15	28°D39	27°17	24° 2	5° 2	W24
T 25	2 13 16	1°33'52	20°47	23°49	9°48	11°57	14°29	13°43	8°17	13° 5	25°14	28°40	27°14	24° 9	5° 2	T 25
F 26	2 17 12	2°33'53	4♏10	25° 3	10°13	12°27	14°40	13°48	8°18	13° 6	25°13	28°R40	27°11	24°15	5° 3	F 26
S 27	2 21 9	3°33'56	17°19	26°16	10°37	12°57	14°52	13°54	8°18	13° 7	25°13	28°38	27° 8	24°22	5° 4	S 27
S 28	2 25 5	4°34'01	0♏16	27°26	10°58	13°27	15° 4	14° 0	8°19	13° 8	25°12	28°34	27° 4	24°29	5° 5	S 28
M29	2 29 2	5°34'08	13° 2	28°35	11°18	13°56	15°16	14° 6	8°19	13° 9	25°11	28°27	27° 1	24°36	5° 6	M29
T 30	2 32 58	6°34'17	25°38	29°41	11°36	14°26	15°28	14°12	8°20	13°10	25°11	28°17	26°58	24°42	5° 7	T 30
W31	2 36 55	7♏34'28	8♏4	0♏45	11♏52	14♏55	15♏40	14♏18	8♏20	13♏11	25♏10	28♏5	26♏55	24♏49	5♏8	W31

Day	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl
M 1	3s 4	1n 5	2n52	7s35	0s 2	22s47	4s16	21n25	1n 2	21s40	0n22	20s53	1n21	18s51	0s41	22s 9
T 2	3 28	3s 9	3 46	8 18	0 9	23 4	4 20	21 19	1 3	21 41	0 22	20 54	1 21	18 51	0 41	22 9
W 3	3 51	7 9	4 27	9 0	0 16	23 21	4 25	21 12	1 5	21 43	0 21	20 55	1 20	18 51	0 41	22 9
T 4	4 14	10 46	4 54	9 41	0 24	23 38	4 29	21 6	1 6	21 44	0 21	20 56	1 20	18 52	0 41	22 9
F 5	4 38	13 52	5 7	10 22	0 31	23 54	4 33	21 0	1 7	21 46	0 21	20 57	1 20	18 52	0 40	22 9
S 6	5 1	16 20	5 7	11 2	0 38	24 9	4 38	20 54	1 8	21 47	0 21	20 57	1 20	18 52	0 40	22 9
S 7	5 24	18 5	4 53	11 41	0 45	24 25	4 42	20 47	1 9	21 49	0 21	20 58	1 20	18 52	0 40	22 9
M 8	5 47	19 2	4 27	12 20	0 52	24 39	4 46	20 40	1 10	21 51	0 21	20 59	1 20	18 52	0 40	22 9
T 9	6 10	19 9	3 49	12 58	0 58	24 53	4 50	20 34	1 11	21 52	0 21	21 0	1 19	18 52	0 40	22 9
W10	6 33	18 25	3 1	13 36	1 5	25 7	4 53	20 27	1 12	21 54	0 20	21 0	1 19	18 52	0 40	22 9
T 11	6 56	16 49	2 4	14 12	1 12	25 20	4 57	20 20	1 13	21 55	0 20	21 1	1 19	18 52	0 40	22 9
F 12	7 18	14 25	1 0	14 48	1 19	25 32	5 0	20 14	1 15	21 57	0 20	21 2	1 19	18 52	0 40	22 9
S 13	7 41	11 15	0s 8	15 23	1 25	25 44	5 4	20 7	1 16	21 58	0 20	21 3	1 19	18 52	0 40	22 9
S 14	8 4	7 27	1 18	15 57	1 32	25 55	5 7	20 0	1 17	22 0	0 20	21 4	1 19	18 52	0 40	22 9
M15	8 26	3 8	2 25	16 31	1 38	26 6	5 10	19 53	1 18	22 1	0 20	21 4	1 18	18 53	0 40	22 9
T 16	8 48	1n27	3 16	17 3	1 44	26 16	5 13	19 46	1 19	22 3	0 20	21 5	1 18	18 53	0 40	22 9
W17	9 10	6 5	4 25	17 35	1 50	26 26	5 15	19 39	1 20	22 4	0 19	21 6	1 18	18 53	0 40	22 9
T 18	9 32	10 26	4 49	18 6	1 56	26 35	5 18	19 32	1 22	22 6	0 19	21 7	1 18	18 52	0 40	22 9
F 19	9 54	14 11	5 4	18 35	2 2	26 43	5 20	19 25	1 23	22 7	0 19	21 8	1 18	18 52	0 40	22 9
S 20	10 16	17 3	4 59	19 4	2 7	26 51	5 22	19 17	1 24	22 9	0 19	21 9	1 18	18 52	0 40	22 9
S 21	10 38	18 48	4 35	19 32	2 13	26 58	5 23	19 10	1 25	22 10	0 19	21 9	1 17	18 52	0 40	22 8
M22	10 59	19 18	3 53	19 59	2 18	27 5	5 25	19 3	1 27	22 12	0 19	21 10	1 17	18 52	0 40	22 8
T 23	11 20	18 34	2 57	20 24	2 22	27 11	5 26	18 56	1 28	22 13	0 19	21 11	1 17	18 52	0 40	22 8
W24	11 41	16 42	1 52	20 49	2 27	27 17	5 27	18 48	1 29	22 15	0 18	21 12	1 17	18 52	0 40	22 8
T 25	12 2	13 56	0 42	21 12	2 31	27 21	5 28	18 41	1 30	22 16	0 18	21 13	1 17	18 52	0 40	22 8
F 26	12 23	10 27	0n29	21 34	2 35	27 26	5 28	18 34	1 32	22 18	0 18	21 14	1 17	18 52	0 40	22 8
S 27	12 44	6 31	1 38	21 55	2 38	27 29	5 28	18 26	1 33	22 19	0 18	21 14	1 17	18 52	0 40	22 8
S 28	13 4	2 20	2 40	22 14	2 41	27 32	5 28	18 19	1 34	22 21	0 18	21 15	1 16	18 52	0 40	22 8
M29	13 24	1s54	3 33	22 32	2 43	27 34	5 27	18 12	1 35	22 22	0 18	21 16	1 16	18 51	0 40	22 8
T 30	13 44	5 59	4 14	22 49	2 45	27 36	5 26	18 4	1 37	22 24	0 18	21 17	1 16	18 51	0 40	22 8
W31	14s 4	9s45	4n43	23s 4	2s47	27s36	5s24	17n57	1n38	22s25	0n18	21s18	1n16	18s51	0s40	22s 8

Julian Day Number = 2328731.5, Delta T = 33.85 sec
Ecliptic obliquity = 23°28'52, Nutation = - 0°00'10, out-of-bounds declination in red
Ayanamsha: Fagan/Bradley = 20°02'48, Lahiri = 19°09'49Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1663

geocentric

NOVEMBER 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
T 1	2 40 52	8♈34'41	20♈19	1♈46	12♈6	15♈24	15♈52	14♈25	8♈21	13♈12	25°R 9	27°R52	26♈52	24♈56	5♈9	T 1
F 2	2 44 48	9°34'56	2♈26	2°43	12°18	15°53	16°5	14°31	8°22	13°13	25°II 8	27♈38	26°48	25°2	5°11	F 2
S 3	2 48 45	10°35'12	14°25	3°38	12°28	16°21	16°17	14°37	8°22	13°15	25°8	27°26	26°45	25°9	5°12	S 3
S 4	2 52 41	11°35'30	26°17	4°28	12°36	16°50	16°29	14°43	8°23	13°16	25°7	27°15	26°42	25°16	5°13	S 4
M 5	2 56 38	12°35'50	8♈3	5°14	12°41	17°18	16°42	14°50	8°24	13°17	25°6	27°8	26°39	25°22	5°15	M 5
T 6	3 0 34	13°36'11	19°56	5°54	12°44	17°46	16°54	14°56	8°25	13°19	25°5	27°3	26°36	25°29	5°16	T 6
W 7	3 4 31	14°36'34	1♈50	6°30	12°R45	18°13	17°7	15°2	8°26	13°20	25°4	27°0	26°33	25°36	5°18	W 7
T 8	3 8 27	15°36'58	13°54	6°59	12°43	18°41	17°19	15°9	8°27	13°21	25°3	27°D 0	26°29	25°43	5°20	T 8
F 9	3 12 24	16°37'23	26°13	7°21	12°38	19°8	17°32	15°15	8°28	13°23	25°3	27°R 0	26°26	25°49	5°21	F 9
S 10	3 16 21	17°37'50	8♈53	7°35	12°32	19°34	17°45	15°22	8°29	13°24	25°2	26°59	26°23	25°56	5°23	S 10
S 11	3 20 17	18°38'18	21°58	7°R41	12°23	20°1	17°57	15°28	8°31	13°26	25°1	26°57	26°20	26°3	5°25	S 11
M12	3 24 14	19°38'47	5♈31	7°38	12°11	20°27	18°10	15°35	8°32	13°27	25°0	26°53	26°17	26°9	5°27	M12
T 13	3 28 10	20°39'18	19°35	7°26	11°57	20°53	18°23	15°41	8°33	13°29	24°59	26°46	26°14	26°16	5°29	T 13
W14	3 32 7	21°39'50	4♈5	7°3	11°40	21°19	18°36	15°48	8°34	13°30	24°58	26°36	26°10	26°23	5°31	W14
T 15	3 36 3	22°40'24	18°58	6°29	11°21	21°45	18°49	15°55	8°36	13°32	24°57	26°25	26°7	26°30	5°33	T 15
F 16	3 40 0	23°40'59	4♈5	5°46	11°0	22°10	19°2	16°1	8°37	13°34	24°56	26°13	26°4	26°36	5°35	F 16
S 17	3 43 56	24°41'35	19°14	4°51	10°37	22°35	19°15	16°8	8°39	13°35	24°55	26°2	26°1	26°43	5°38	S 17
S 18	3 47 53	25°42'14	4♈17	3°48	10°11	22°59	19°28	16°15	8°40	13°37	24°54	25°53	25°58	26°50	5°40	S 18
M19	3 51 50	26°42'53	19°3	2°37	9°44	23°24	19°41	16°22	8°42	13°38	24°53	25°47	25°54	26°56	5°42	M19
T 20	3 55 46	27°43'35	3♈27	1°19	9°14	23°48	19°54	16°28	8°43	13°40	24°52	25°44	25°51	27°3	5°45	T 20
W21	3 59 43	28°44'18	17°28	29♈58	8°44	24°11	20°8	16°35	8°45	13°42	24°51	25°43	25°48	27°10	5°47	W21
T 22	4 3 39	29°45'03	1♈6	28°36	8°11	24°35	20°21	16°42	8°47	13°44	24°50	25°43	25°45	27°16	5°50	T 22
F 23	4 7 36	0♈45'49	14°22	27°15	7°38	24°58	20°34	16°49	8°48	13°45	24°49	25°42	25°42	27°23	5°52	F 23
S 24	4 11 32	1°46'37	27°20	25°59	7°3	25°21	20°47	16°56	8°50	13°47	24°48	25°40	25°39	27°30	5°55	S 24
S 25	4 15 29	2°47'26	10♈2	24°50	6°28	25°43	21°1	17°3	8°52	13°49	24°47	25°36	25°35	27°37	5°58	S 25
M26	4 19 25	3°48'17	22°32	23°49	5°52	26°5	21°14	17°10	8°54	13°51	24°45	25°28	25°32	27°43	6°0	M26
T 27	4 23 22	4°49'09	4♈52	22°58	5°15	26°26	21°28	17°17	8°56	13°53	24°44	25°17	25°29	27°50	6°3	T 27
W28	4 27 19	5°50'03	17°4	22°19	4°39	26°48	21°41	17°24	8°58	13°55	24°43	25°4	25°26	27°57	6°6	W28
T 29	4 31 15	6°50'57	29°9	21°51	4°3	27°9	21°55	17°31	9°0	13°56	24°42	24°50	25°23	28°3	6°9	T 29
F 30	4 35 12	7♈51'53	11♈7	21♈34	3♈27	27♈29	22♈8	17♈38	9♈2	13♈58	24♈41	24♈35	25♈19	28♈10	6♈12	F 30

Day	☉	☽	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
T 1	14s23	13s 4	4n58	23s17	2s48	27s36	5s22	17n50	1n39	22s26	0n17	21s19	1n16	18s51	0s40	22s 8	0n42
F 2	14 42	15 47	5 0	23 29	2 48	27 36	5 20	17 42	1 41	22 28	0 17	21 19	1 16	18 51	0 42	16 50	6 34
S 3	15 1	17 48	4 48	23 39	2 47	27 34	5 17	17 35	1 42	22 29	0 17	21 20	1 16	18 50	0 40	22 8	0 42
S 4	15 20	19 2	4 24	23 47	2 46	27 32	5 14	17 28	1 44	22 31	0 17	21 21	1 16	18 50	0 40	22 7	0 42
M 5	15 39	19 26	3 48	23 54	2 44	27 29	5 11	17 21	1 45	22 32	0 17	21 22	1 15	18 50	0 40	22 7	0 42
T 6	15 57	18 59	3 3	23 58	2 41	27 26	5 6	17 13	1 46	22 33	0 17	21 23	1 15	18 50	0 40	22 7	0 42
W 7	16 15	17 41	2 9	24 0	2 37	27 21	5 2	17 6	1 48	22 35	0 17	21 24	1 15	18 49	0 40	22 7	0 42
T 8	16 33	15 35	1 9	24 0	2 32	27 15	4 56	16 59	1 49	22 36	0 17	21 24	1 15	18 49	0 39	22 7	0 42
F 9	16 50	12 44	0 4	23 58	2 25	27 9	4 51	16 52	1 51	22 37	0 16	21 25	1 15	18 49	0 39	22 7	0 42
S 10	17 7	9 13	1s 2	23 52	2 17	27 2	4 44	16 45	1 52	22 39	0 16	21 26	1 15	18 48	0 39	22 7	0 42
S 11	17 24	5 9	2 8	23 44	2 8	26 54	4 37	16 38	1 53	22 40	0 16	21 27	1 15	18 48	0 39	22 7	0 42
M12	17 41	0 41	3 9	23 33	1 58	26 45	4 29	16 31	1 55	22 41	0 16	21 28	1 15	18 48	0 39	22 7	0 42
T 13	17 57	3n58	4 0	23 19	1 46	26 34	4 21	16 24	1 56	22 42	0 16	21 29	1 15	18 47	0 39	22 6	0 42
W14	18 13	8 33	4 38	23 2	1 32	26 23	4 12	16 17	1 58	22 44	0 16	21 29	1 14	18 47	0 39	22 6	0 42
T 15	18 28	12 43	4 58	22 41	1 16	26 11	4 3	16 10	1 59	22 45	0 16	21 30	1 14	18 47	0 39	22 6	0 42
F 16	18 44	16 8	4 57	22 17	1 0	25 58	3 53	16 3	2 1	22 46	0 16	21 31	1 14	18 46	0 39	22 6	0 42
S 17	18 59	18 27	4 36	21 49	0 41	25 44	3 42	15 56	2 2	22 47	0 16	21 32	1 14	18 46	0 39	22 6	0 41
S 18	19 13	19 29	3 56	21 19	0 22	25 29	3 31	15 50	2 4	22 48	0 15	21 33	1 14	18 45	0 39	22 6	0 41
M19	19 27	19 9	3 1	20 45	0 2	25 14	3 19	15 43	2 6	22 49	0 15	21 33	1 14	18 45	0 39	22 6	0 41
T 20	19 41	17 33	1 55	20 9	0n19	24 57	3 6	15 37	2 7	22 51	0 15	21 34	1 14	18 44	0 39	22 5	0 41
W21	19 55	14 56	0 43	19 33	0 39	24 39	2 53	15 30	2 9	22 52	0 15	21 35	1 14	18 44	0 39	22 5	0 41
T 22	20 8	11 33	0n28	18 55	0 59	24 20	2 40	15 24	2 10	22 53	0 15	21 36	1 14	18 43	0 39	22 5	0 41
F 23	20 21	7 39	1 37	18 19	1 18	24 1	2 26	15 18	2 12	22 54	0 15	21 36	1 14	18 43	0 39	22 5	0 41
S 24	20 33	3 29	2 39	17 44	1 35	23 41	2 12	15 11	2 14	22 55	0 15	21 37	1 13	18 43	0 39	22 5	0 41
S 25	20 45	0s45	3 31	17 13	1 51	23 21	1 57	15 5	2 15	22 56	0 15	21 38	1 13	18 42	0 39	22 5	0 41
M26	20 57	4 52	4 13	16 45	2 5	23 0	1 42	15 0	2 17	22 57	0 15	21 39	1 13	18 41	0 39	22 5	0 41
T 27	21 8	8 45	4 42	16 21	2 16	22 38	1 27	14 54	2 19	22 58	0 15	21 39	1 13	18 41	0 39	22 4	0 41
W28	21 19	12 12	4 57	16 2	2 25	22 16	1 11	14 48	2 20	22 59	0 14	21 40	1 13	18 40	0 39	22 4	0 41
T 29	21 29	15 8	4 59	15 48	2 32	21 54	0 56	14 42	2 22	23 0	0 14	21 41	1 13	18 40	0 39	22 4	0 41
F 30	21s40	17s24	4n48	15s39	2n37	21s32	0s40	14n37	2n24	23s 1	0n14	21s42	1n13	18s39	0s39	22s 4	0n41

Julian Day Number = 2328762.5, Delta T = 33.79 sec

Ecliptic obliquity = 23°28'51, Nutation = - 0°00'11, out-of-bounds declination in red

Ayanamsha: Fagan/Bradley = 20°02'53, Lahiri = 19°09'53Greg. Calendar

ASTRODIENST EPHEMERIS for the year 1663

geocentric

DECEMBER 1663 GC

00:00 UT

Day	Sid.t	☉	☽	♂	♀	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	Day
S 1	4 39 8	8♂52'50	23♂1	21°D29	2°R52	27♂49	22♂22	17♂45	9≈ 4	14♂0	24°R40	24°R22	25♂16	28♂17	6≈15	S 1	
S 2	4 43 5	9°53'48	4♂51	21♂34	2♂18	28° 9	22°35	17°52	9° 6	14° 2	24♂39	24♂10	25°13	28°23	6°18	S 2	
M 3	4 47 1	10°54'47	16°40	21°48	1°45	28°28	22°49	17°59	9° 8	14° 4	24°38	24° 1	25°10	28°30	6°21	M 3	
T 4	4 50 58	11°55'47	28°30	22°12	1°13	28°47	23° 3	18° 6	9°11	14° 6	24°36	23°55	25° 7	28°37	6°24	T 4	
W 5	4 54 54	12°56'47	10≈24	22°43	0°43	29° 5	23°16	18°13	9°13	14° 8	24°35	23°52	25° 4	28°44	6°28	W 5	
T 6	4 58 51	13°57'48	22°26	23°22	0°14	29°23	23°30	18°20	9°15	14°10	24°34	23°D51	25° 0	28°50	6°31	T 6	
F 7	5 2 48	14°58'49	4♂42	24° 7	29♂48	29°41	23°44	18°27	9°17	14°12	24°33	23°52	24°57	28°57	6°34	F 7	
S 8	5 6 44	15°59'51	17°17	24°58	29°23	29°58	23°57	18°34	9°20	14°14	24°32	23°R52	24°54	29° 4	6°38	S 8	
S 9	5 10 41	17° 0'54	0♂15	25°54	29° 1	0♂14	24°11	18°41	9°22	14°16	24°30	23°51	24°51	29°10	6°41	S 9	
M10	5 14 37	18° 1'56	13°40	26°54	28°41	0°30	24°25	18°48	9°25	14°18	24°29	23°48	24°48	29°17	6°45	M10	
T 11	5 18 34	19° 3'00	27°36	27°58	28°23	0°46	24°38	18°55	9°27	14°21	24°28	23°43	24°45	29°24	6°48	T 11	
W12	5 22 30	20° 4'04	12♂2	29° 5	28° 7	1° 1	24°52	19° 2	9°30	14°23	24°27	23°35	24°41	29°30	6°52	W12	
T 13	5 26 27	21° 5'08	26°54	0♂15	27°54	1°15	25° 6	19° 9	9°32	14°25	24°26	23°26	24°38	29°37	6°55	T 13	
F 14	5 30 23	22° 6'13	12♂6	1°27	27°44	1°30	25°20	19°16	9°35	14°27	24°25	23°16	24°35	29°44	6°59	F 14	
S 15	5 34 20	23° 7'18	27°27	2°42	27°36	1°43	25°33	19°23	9°38	14°29	24°23	23° 7	24°32	29°51	7° 3	S 15	
S 16	5 38 17	24° 8'24	12♂44	3°59	27°30	1°56	25°47	19°30	9°40	14°31	24°22	22°59	24°29	29°57	7° 6	S 16	
M17	5 42 13	25° 9'31	27°48	5°18	27°27	2° 9	26° 1	19°37	9°43	14°33	24°21	22°54	24°25	0♂4	7°10	M17	
T 18	5 46 10	26°10'38	12♂31	6°38	27°D27	2°20	26°15	19°44	9°46	14°36	24°20	22°52	24°22	0°11	7°14	T 18	
W19	5 50 6	27°11'45	26°47	7°59	27°28	2°32	26°29	19°51	9°48	14°38	24°19	22°D52	24°19	0°17	7°18	W19	
T 20	5 54 3	28°12'54	10♂36	9°21	27°33	2°43	26°42	19°58	9°51	14°40	24°17	22°52	24°16	0°24	7°22	T 20	
F 21	5 57 59	29°14'03	23°57	10°45	27°39	2°53	26°56	20° 5	9°54	14°42	24°16	22°R53	24°13	0°31	7°26	F 21	
S 22	6 1 56	0♂15'12	6♂56	12° 9	27°48	3° 2	27°10	20°12	9°57	14°44	24°15	22°53	24°10	0°37	7°30	S 22	
S 23	6 5 52	1°16'22	19°34	13°35	28° 0	3°11	27°24	20°19	10° 0	14°47	24°14	22°51	24° 6	0°44	7°34	S 23	
M24	6 9 49	2°17'33	1♂57	15° 1	28°13	3°19	27°37	20°26	10° 3	14°49	24°13	22°47	24° 3	0°51	7°38	M24	
T 25	6 13 46	3°18'44	14° 8	16°27	28°29	3°27	27°51	20°33	10° 6	14°51	24°11	22°41	24° 0	0°58	7°42	T 25	
W26	6 17 42	4°19'55	26°11	17°55	28°46	3°34	28° 5	20°40	10° 9	14°53	24°10	22°32	23°57	1° 4	7°46	W26	
T 27	6 21 39	5°21'07	8♂7	19°23	29° 6	3°40	28°19	20°47	10°12	14°56	24° 9	22°23	23°54	1°11	7°50	T 27	
F 28	6 25 35	6°22'18	20° 0	20°51	29°28	3°46	28°33	20°54	10°15	14°58	24° 8	22°13	23°51	1°18	7°54	F 28	
S 29	6 29 32	7°23'30	1♂50	22°20	29°51	3°51	28°46	21° 1	10°18	15° 0	24° 7	22° 4	23°47	1°24	7°58	S 29	
S 30	6 33 28	8°24'43	13°40	23°50	0♂16	3°55	29° 0	21° 8	10°21	15° 2	24° 6	21°57	23°44	1°31	8° 2	S 30	
M31	6 37 25	9♂25'54	25♂32	25♂20	0♂43	3♂59	29♂14	21♂15	10≈24	15♂5	24♂4	21♂51	23♂41	1♂38	8≈ 7	M31	

Day	☉	☾		♂		♀		♂		♂		♂		♂		♂		♂		♂		♂		♂	
	decl	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat	decl	lat
S 1	21s49	18s54	4n24	15s35	2n41	21s10	0s24	14n32	2n26	23s 2	0n14	21s42	1n13	18s39	0s39	22s 4	0n41	16n48	6s35	13n25	13n 7	19s 9	12s23	6n34	
S 2	21 58	19 35	3 49	15 35	2 42	20 48	0 9	14 26	2 27	23 2	0 14	21 43	1 13	18 38	0 39	22 3	0 41	16 48	6 35	13 29	13 8	19 10	12 22	6 34	
M 3	22 7	19 24	3 4	15 38	2 42	20 26	0n 6	14 21	2 29	23 3	0 14	21 44	1 13	18 37	0 39	22 3	0 41	16 48	6 35	13 32	13 9	19 10	12 22	6 33	
T 4	22 16	18 22	2 10	15 46	2 41	20 5	0 22	14 16	2 31	23 4	0 14	21 44	1 13	18 37	0 39	22 3	0 41	16 48	6 35	13 34	13 10	19 11	12 21	6 33	
W 5	22 23	16 32	1 11	15 56	2 38	19 44	0 37	14 12	2 33	23 5	0 14	21 45	1 13	18 36	0 39	22 3	0 41	16 48	6 35	13 35	13 11	19 11	12 21	6 32	
T 6	22 31	13 56	0 8	16 9	2 35	19 24	0 51	14 7	2 35	23 6	0 14	21 46	1 13	18 36	0 39	22 3	0 41	16 48	6 35	13 35	13 13	19 12	12 21	6 32	
F 7	22 38	10 42	0s57	16 24	2 31	19 4	1 6	14 3	2 36	23 6	0 14	21 46	1 12	18 35	0 39	22 3	0 41	16 47	6 35	13 35	13 14	19 12	12 20	6 32	
S 8	22 45	6 54	2 1	16 41	2 25	18 46	1 19	13 58	2 38	23 7	0 13	21 47	1 12	18 34	0 39	22 2	0 41	16 47	6 35	13 35	13 15	19 13	12 20	6 31	
S 9	22 51	2 40	3 1	17 0	2 20	18 28	1 33	13 54	2 40	23 8	0 13	21 48	1 12	18 34	0 39	22 2	0 41	16 47	6 35	13 36	13 16	19 14	12 19	6 31	
M10	22 56	1n49	3 53	17 20	2 14	18 11	1 46	13 50	2 42	23 9	0 13	21 48	1 12	18 33	0 39	22 2	0 41	16 47	6 35	13 37	13 17	19 14	12 19	6 31	
T 11	23 2	6 23	4 33	17 40	2 7	17 54	1 59	13 47	2 44	23 9	0 13	21 49	1 12	18 32	0 39	22 2	0 41	16 47	6 35	13 38	13 18	19 15	12 18	6 30	
W12	23 7	10 45	4 58	18 2	2 0	17 39	2 11	13 43	2 46	23 10	0 13	21 50	1 12	18 32	0 39	22 2	0 41	16 47	6 35	13 41	13 19	19 15	12 18	6 30	
T 13	23 11	14 35	5 3	18 24	1 53	17 25	2 22	13 40	2 48	23 10	0 13	21 50	1 12	18 31	0 39	22 1	0 41	16 47	6 35	13 44	13 20	19 16	12 17	6 30	
F 14	23 15	17 32	4 48	18 46	1 46	17 12	2 33	13 36	2 50	23 11	0 13	21 51	1 12	18 30	0 39	22 1	0 41	16 47	6 35	13 47	13 21	19 16	12 16	6 29	
S 15	23 18	19 16	4 12	19 8	1 38	17 0	2 44	13 33	2 52	23 12	0 13	21 52	1 12	18 29	0 39	22 1	0 41	16 47	6 35	13 50	13 22	19 17	12 16	6 29	
S 16	23 21	19 36	3 17	19 30	1 30	16 49	2 54	13 30	2 54	23 12	0 13	21 52	1 12	18 29	0 39	22 1	0 41	16 47	6 35	13 53	13 23	19 17	12 15	6 29	
M17	23 24	18 31	2 10	19 52	1 23	16 39	3 3	13 28	2 56	23 13	0 13	21 53	1 12	18 28	0 39	22 0	0 41	16 47	6 35	13 54	13 24	19 18	12 15	6 28	
T 18	23 26	16 12	0 55	20 14	1 15	16 30	3 12	13 25	2 58	23 13	0 12	21 53	1 12	18 27	0 39	22 0	0 41	16 47	6 34	13 55	13 25	19 18	12 14	6 28	
W19	23 27	12 56	0n21	20 35	1 7	16 23	3 20	13 23	3 0	23 14	0 12	21 54	1 12	18 26	0 38	22 0	0 41	16 47	6 34	13 55	13 26	19 19	12 13	6 28	
T 20	23 28	9 3	1 34	20 55	0 59	16 16	3 28	13 21	3 2	23 14	0 12	21 55	1 12	18 26	0 38	22 0	0 41	16 47	6 34	13 55	13 27	19 19	12 13	6 27	
F 21	23 29	4 50	2 39	21 15	0 51	16 10	3 36	13 19	3 4	23 15	0 12	21 55	1 12	18 25	0 38	22 0	0 41	16 47	6 34	13 55	13 28	19 20	12 12	6 27	
S 22	23 29	0 31	3 34	21 35	0 43	16 5	3 43	13 18	3 6	23 15	0 12	21 56	1 12	18 24	0 38	21 59	0 41	16 47	6 34	13 55	13 29	19 20	12 11	6 27	
S 23	23 28	3s42	4 17	21 53	0 35	16 2	3 49	13 17	3 8	23 15	0 12	21 56	1 12	18 23	0 38	21 59	0 41	16 47	6 34	13 55	13 31	19 21	12 11	6 27	
M24	23 28	7 41	4 47	22 11	0 27	15 59	3 55	13 16	3 10	23 16	0 12	21 57	1 12	18 23	0 38	21 59	0 41	16 47	6 34	13 57	13 32	19 21	12 10	6 26	
T 25	23 26	11 16	5 4	22 28	0 20	15 57	4 0	13 15	3 13	23 16	0 12	21 57	1 12	18 22	0 38	21 59	0 41	16 48	6 34	13 59	13 33	19 22	12 9	6 26	
W26	23 25	14 22	5 6	22 44	0 12	15 56	4 5	13 14	3 15	23 16	0 12	21 58	1 11	18 21	0 38	21 58	0 41	16 48	6 34	14 1	13 34	19 22	12 8	6 26	
T 27	23 22	16 50	4 56	22 59	0 5	15 55	4 10	13 14	3 17	23 17	0 12	21 58	1 11	18 20	0 38	21 58	0 41	16 48	6 34	14 5	13 35	19 23	12 8	6 26	
F 28	23 20	18 35	4 32	23 13	0s 3	15 56	4 14	13 14	3 19	23 17	0 12	21 59	1 11	18 19	0 38	21 58	0 41	16 48	6 34	14 8	13 36	19 23	12 7	6 25	
S 29	23 16	19 31	3 57	23 26	0 10	15 57	4 18	13 14	3 21	23 17	0 11	21 59	1 11	18 18	0 38	21 58	0 41	16 48	6 34	14 11	13 37	19 24	12 6	6 25	
S 30	23 13	19 36	3 12	23 37	0 17	15 59	4 21	13 15	3 23	23 17	0 11	22 0	1 11	18 18	0 38	21 58	0 41	16 48	6 34	14 13	13 38	19 24	12 5	6 25	
M31	23s 9	18s49	2n18	23s48	0s24	16s 1	4n25	13n15	3n26	23s17	0n11	22s 0	1n11	18s17	0s38	21s57	0n41	16n48	6s34	14n15	13n39	19s25	12s 4	6n25	