

ASTRONOMICAL EPHEMERIS
of
Geocentric Places of Planets
for
1942

Published by
Shree Jiwaree Observatory, Ujjain,
with the sanction of Education Department,
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PREFACE.

This publication is an attempt to meet the requirements of the astrologers and computators of Panchangas. The computations are made from the Tables of Newcomb, Brown, Jyotirganita, and Sarvaṇand-Laghav by late Principal G. S. Apte.

The places of the heavenly bodies and the Sidereal Time are computed for the meridian of Ujjain and are true for 12 o'clock noon Indian Standard Time. It is earnestly hoped that this departure from the standard convention will prove more useful to the Indian computer who is already familiar with the calculations reduced to the longitude of Ujjain. The uniform use of Indian Standard Time (I. S. T.) made in the following pages will also save much trouble in calculation.

For want of sufficient time the work was hurried through the press and though great care was taken in correcting proofs, it is very likely that a few mistakes must have remained in the figure-work through oversight.

Thanks are due to the Inspector-General of Education, Gwalior Government for the encouragement given in bringing out this publication and also to Mr. A. K. Shirke, Manager, Alijah Darbar Press, Gwalior, for the pains taken by him in supervising the printing work.

UJJAIN :
Dated 16th December 1941. } R. V. VAIDYA, M.A., B.T.,
JYOTIRVIDYA RATNA,
Superintendent.
Shree Jiwaji Observatory,
Ujjain.

Printed at the Alijah Darbar Press, Lashkar,
GWALIOR.

EXPLANATIONS.

The places of the Sun, Moon and the Planets given here, are true for the mean equinox of 1942 *i. e.*, *Sayana*. They are given for 12 o'clock noon Indian Standard Time (I. S. T.). The Tithis and the Sid. Time (reduced to the longitude of Ujjain) are likewise given for the noon (I. S. T.).

The Nirayana places of the Sun, Moon and the Planets can be obtained by subtracting respective Ayanamshas from the places given in this Ephemeris. This subtraction is not necessary for the Tithis.

Examples.

- (1) To find the longitude of Moon on 20th June, 1942 at 20h 30m.—

Moon at 12 hours on 21-6-42 = $22^{\circ} \text{Vi} 05'$

Moon at 12 hours on 20-6-42 = $9^{\circ} 21'$

Diff = $12^{\circ} 44'$ motion in
24 hours.

Motion in (20h. 30m.—12h.) or $8\frac{1}{2}$ hrs. = $4^{\circ} 31'$

Required longitude = $9^{\circ} \text{Vi} 21' + 4^{\circ} 31' = 13^{\circ} \text{vi} 52'$

- (2) Required the longitude of Venus on 17th February 1942, at 3h. 45min.—

Venus at 12h. on 16-2-42 = $6^{\circ} \text{Aq} 30'$

Venus at 12h. on 17-2-42 = $6^{\circ} 13'$

Diff = $17'$ motion in
24 hours.

(It will be seen here that the motion is retrograde).

Motion in (12h.—3h 45m.) or 8h. 15m. = $6'$ and since the time given is *before* noon and the planet is *retrograde* this quantity must be *added* to the longitude on 17th. Hence the required longitude = $6^{\circ} \text{Aq} 13' + 6' = 6^{\circ} \text{Aq} 19'$.

Sidereal Time.—This is required for finding the Ascendant (Lagna) and Mid-heaven (Dashama).

Formula.—Sid. Time = $S + I + C + K$, where,

S = Sid. Time at Ujjain at noon.

I = Interval between the moment for which the Sid. Time is required and the noon (S. T.). This is positive or negative according as the given moment is *after* or *before* the noon.

C = Correction due to the longitudinal difference and is positive or negative according as the place is to the east or the west of Ujjain and is to be reckoned at 4 minutes per day.

K = Motion of the Sid. Time at the rate of 9.86 seconds per mean solar hour or $\cdot 82$ seconds per minute.

Note.— K and I are of the same sign.

- (3) *Ex. To find the Sid. Time on 11th May, 1942, at 7h. 30m. (S. T.) for Travancore (Long. 7m. 40s. East of Ujjain).*—

Sid. Time = 2h. 47m. 0s.—4h. 30m. + 4m. 40s.—0m. 45s. = 1h. 39m. 5s.

This being negative must be subtracted from 24h., so that the required Sid. Time = 22h. 20m. 55s.

Note.—The Ascendant or Mid-heaven (M. C.) can be found from the above Sid. Time by consulting a Table of Houses.

Tithis.

The decimal part indicates the portion of the next Tithi elapsed at noon.

The time of the local sun-rise for a given day must be known in order to determine the ruling Tithi for a particular place. The following example will make this clear:—

(4) *Ex. To find the Tithi at Ujjain on 11th May, 1942.*—

Tithi at noon on 12-5-42 = 27.23

Tithi at noon on 10-5-42 = 25.30

Diff. = 1.93 = motion in 48 hours.

i. e. .04 tithi per hour.

Sun rises at Ujjain at 5h. 48m. on this day, so that the interval between the sun-rise and noon is 6h. 12m. and the motion of Tithi during this interval is .32.—

But the Tithi at noon on 11-5-42 = 26.27

Therefore the Tithi at sunrise on 11-5-42 = 26.27 — .32
= 25.95

Hence the required Tithi is 26th or (26-15) *i. e.*, 11th of Krishna-paksha.

The part to be completed is 26-25.95 or .05 and the time required at the rate of .04 per hour is 1h. 15min. The sun rises at 5h. 48m. The *ending moment* of this Tithi is, therefore, 5h. 48m. + 1h. 15m. or 7h. 3m.

Note.—1. When the interval between the ending moments of two consecutive Tithis lies *wholly* between the times of sun-rise on two consecutive days there will be a case of *Tithi-kshaya*.

2. When the interval between the sun-rise on two consecutive days lies wholly between the ending moments of two consecutive Tithis, there will be a case of *Tithi-vridhi*.

Abbreviations.

Ar Aries	मेघ	Le Leo	सिंह	Sa Sagittarius	धनु
Ta Taurus	वृषभ	Vi Virgo	कन्या	Ca Capricornus	मकर
Ge Gemini	मिथुन	Li Libra	तुला	Aq Aquarius	कुंभ
C Cancer	कर्क	Sc Scorpio	वृश्चिक	Pi Pisces	मीन

Date.	Sid. Time.			SUN.		MOON.				
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.		
1 Th.	18	14	28	10 Ca 13	23 S	3 24 Ge 51	4 S	56	18 N	18
2 F.		18	24	11	14 22	57 6 C 55	4	39	18	30
3 Sa.		22	21	12	15	52 19	10 4	9	18	19
4 Su.		26	18	13	16	46 1 Le 29	3	29	16	18
5 M.		30	14	14	17	40 13	59 2	37	14	7
6 Tu		34	11	15	18	33 26	40 1	39	11	3
7 W.		38	7	16	19	26 9 Vi 31	0	31	7	32
8 Th.		42	4	17	20	19 22	42 0 N	39	3	35
9 F.		46	1	18	21	11 5 Li 2	1	50	0 S	39
10 Sa.		49	57	19	23	3 19	37 2	53	4	55
11 Su.		53	54	20	24 21	54 3 Sc 39	3	48	9	5
12 M.		57	51	21	25	44 17	49 4	31	12	46
13 Tu.	19	1	48	22	26	33 2 Sa 30	4	58	15	41
14 W.		5	44	23	27	22 17	13 5	5	17	35
15 Th.		9	41	24	28	11 2 Ca 8	4	49	18	25
16 F.		13	37	25	29 21 S	1 16	53 4	17	17	57

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	2 S	5 24 S 29	0 N 35	14 S 47	0 N 48	10 N 24	0 S 36	21 N 50
5	2	2 23	3 1	28 13	47 0	52 11 9	0 35	21 48
9	1	58 21	48 2	21 12	35 0	56 11 54	0 34	21 47
13	1	52 20	39 3	13 11	30 0	59 12 39	0 33	21 46
16	1	35 19	10 3	57 10	53 1	3 13 14	0 32	21 45

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	16 Ca 16	18 Aq 35	25 Ar 2	13 Ge 23	22 Ta 5	26 Ta 49	13.72
2	17 50	59	29	R 16	R 3	R 48	14.64
3	19 27	19 21	56	10	1	47	15.58
4	21 9	42 26	23	3 21	59	46	16.52
5	22 50	20 1	51 12	58	57	45	17.48
6	24 29	17 27	18	53	55	43	18.45
7	26 3	30	46	48	53	41	19.43
8	27 41	40 28	14	43	51	39	20.45
9	29 20	49	43	38	49	37	21.48
10	0 Aq 58	58 29	11	33	47	36	22.52
11	2 37	21 6	40	28	45	35	23.60
12	4 15	11 0 Ta 9	23	44	34	24.70	
13	5 54	12	39	18	43	33	25.83
14	7 33	R 11 1	9	13	43	32	26.98
15	9 10	8	39	8	42	31	28.14
16	10 49	21 2 2	10 12	4 21	42 26	30	29.29

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	2 S	14 16 N 8	0 S 14	19 N 15	1 N 18	1 N 15	29 Vi 53	16 Vi 51
5	13	7	"	14 1	19	15	R 52	39
9	12	6	"	13	"	16	52	26
13	11	5	"	12	"	16	51	13
16	10	5	"	11	"	17	49	3

Date.	Sid. Time.			SUN.		MOON.				
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.		
16 F.	19	13	37	25 Ca	29 21 S	1 16 Ca	53 4 N	17 17 S	57	
17 Sa		17	34	26	30 20	51 1 Aq	33 3	29 16	21	
18 SU.		21	31	27	31	40 15	51 2	27 13	42	
19 M.		25	27	28	32	28 29	47 1	19 10	19	
20 Tu.		29	24	29	34	15 13 Pi	22 0	8 6	30	
21 W.		33	20	0 Aq.	35	2 26	23 1 S	4 3	22	
22 Th.		37	17	1	36 19	48 9 Ar	7 2	8 1 N	37	
23 F.		41	13	2	37	34 21	29 3	5 5	29	
24 Sa.		45	10	3	38	20 3 Ta	37 3	53 8	58	
25 SU.		49	6	4	39	6 15	30 4	31 12	03	
26 M.		53	3	5	40 18	51 27	25 4	55 14	43	
27 Tu.		56	59	6	41	36 9 GE	17 5	8 16	41	
28 W.	20	0	55	7	42	21 21	9 5	6 17	58	
29 Th.		4	51	8	43	5 3 C	17 4	52 18	25	
30 F.		8	47	9	44 17	49 15	30 4	26 18	7	
31 Sa.		12	45	10	45	33 27	49 3	45 16	55	

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	1 S	35 19 S	10 3 N	57 10 S	53 1 N	3 13 N	14 0 S	32 21 N
20	0	53 16	52 4	56 10	22 1	6 14	0 0	31 21
24	0	7 14	33 5	55 9	55 1	9 14	46 0	30 21
28	0 N	43 12	17 6	41 9	30 1	12 15	17 0	29 21
31	1	35 11	4 7	16 9	29 1	14 16	0 0	28 21

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	10 Aq 49	21 Aq 2	2 Ta 10	12 Ge 4	21 Ta 42	26 Ta 30	29.29
17	12	17 20 R	53 41	R 0	R 41	R 29	0.42
18	14	48	40 3	12 11	56 41	28	1.53
19	15	22	24	43	53 40	27	2.60
20	16	51	6 4	14	50 40	26	3.65
21	18	16 19	48 45	47	39	26	4.65
22	19	37	27 5	16 44	38 25	5.63	
23	20	51	4	47 41	38 25	6.58	
24	22	2 18	39 6	18 39	D 38	24	7.50
25	23	10	10	50 37	38 24	8.40	
26	24	7 17	40 7	22 35	38 23	9.31	
27	25	2	7	54 33	39 23	10.22	
28	25	41 16	35 8	26 31	39 22	11.12	
29	26	15	1	58 29	40 22	12.05	
30	26	41 15	23 9	30 27	40 21	12.98	
31	26	57 14	47 10	3 11 Ge	25 21 Ta	41 21	13.92

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
16	2 S	10 16 N	50 S	14 19 N	11 1 N	19 1 N	17 29 Vi	49 16 Vi
20		9	6	„	10	„	18 R	47 15
24		8	7	„	10	„	19	44
28		7	8	„	9 1 N	20	20	41
31		6	9	„	9	„	21	38

Date.	Sid. Time.			SUN.		MOON.			
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	
1 Su	20	16	41	11 Aq	46 17 S	17 10 Le	27 2 S	49 14 N	50
2 M.		20	38	12	47	0 23	14 1	50 11	48
3 Tu.		24	35	13	48 16	43 6 Vi	19 0	42 8	31
4 W.		28	31	14	49	25 19	33 0 N	27 4	34
5 Th.		32	28	15	49	7 2 Li	54 1	39 0	27
6 F.		36	24	16	50 15	49 16	32 2	39 3 S	52
7 Sa.		40	21	17	51	31 0 Sc	23 3	40 7	59
8 Su		44	17	18	52	12 14	48 4	29 11	44
9 M.		48	14	19	52 14	53 28	29 5	2 14	46
10 Tu		52	10	20	53	33 12 Sa	41 5	14 17	3
11 W.		56	7	21	54	13 27	7 5	9 18	11
12 Th.	21	0	3	22	55 13	53 11 Ca	30 4	41 18	16
13 F.		3	59	23	55	33 25	48 3	54 17	3
14 Sa.		7	55	24	56	13 10 Aq	3 2	52 14	50
15 SU.	21	11	52	25	57 12	53 24	2 1	49 11	51
16 M.	21	15	48	26	57	33 7 Pi	45 0	35 8	15

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	1 N	52 10 S	46 7 N	30 9 S	30 1 N	15 16 N	12 0 S	28 21 N
5	2	55 10 13	7 56 9	42 17 17	16 53 0	27 21	42	
9	3	30 11 9	8 16 10	4 1 18	17 34 0	27 21	43	
13	3	42 12 20	8 6 10	30 1 19	18 14 0	26 21	45	
16	3	19 13 25	7 57 10	51 1 20	18 42 0	26 21	47	

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	26 Aq	59 14 Aq	9 10 Ta	36 11 Ge	24 21 Ta	42 26 Ta	21 14.89
2	R	52 13 R	44 11 9	R	24 43	R	21 15.87
3		33 12	55 42	23 45		21 16.88	
4		4	18 12	15 23	46 D	21 17.90	
5	25	23 11	42 48	22 47		21 18.92	
6	24	34	6 13	21 D	22 48		21 19.98
7	23	38 10	31 54	22 50		21 21.05	
8	22	35 9	57 14	27 23	52		22 22.13
9	21	28	24 15	1 24	54		22 23.22
10	20	17 8	52 35	25 56		22 24.32	
11	19	6	25 16	9 26	58		23 25.43
12	17	57 7	58 43	28 22	0		23 26.55
13	16	50	32 17	17 30	2		24 27.66
14	15	48	9 51	32 4		24 28.76	
15	14	49 6	49 18	25 34	6		25 29.84
16	14	0	30 59	11 Ge	36 22	9 26	25 0.90

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	2 S	6 16 N	10 0 S	12 19 N	9 1 N	20 1 N	22 29 Vi	37 15 Vi
5		5 13	" 10	" 10	" 24	R	33 0	
9		4 16	" 10	" 10	" 26		29 14	47
13		3 19	" 10	" 10	" 28		25 34	
16		2 22	" 11	" 11	" 30		22 24	

Date.	Sid. Time.			SUN.			MOON,		
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	
16 M.	21	15	48	26 Aq.	57 12 S	33 7 Pi	45 0 N	35 8 S	15
17 Tu.		19	45	27	58	13 21	5 0 S	27 4	8
18 W.		23	41	28	58 11	53 4 Ar	9 1	48 0	7
19 Th.		27	38	29	59	32 16	50 2	55 3 N	55
20 F.		31	35	0 Pi	59	11 29	15 3	49 7	39
21 Sa.		35	31	2	0 10	49 11 Ta	20 4	28 10	51
22 Su.		39	28	3	0	27 23	24 4	57 13	47
23 M.		43	24	4	1	5 5 Ge	18 5	13 16	1
24 Tu.		47	21	5	1 9	43 17	9 5	16 17	33
25 W.		51	17	6	1	19 29	7 5	4 18	18
26 Th.		55	14	7	2 8	57 11 C	12 4	39 18	13
27 F.		59	11	8	2	34 23	31 4	3 17	18
28 Sa.	22	3	8	9	2 8	11 6 Le	1 3	14 15	35

Date.	Mercury.		Venus.		Mars.		Jupiter,	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	3 N 19	13 S 25	7 N 57	10 S 51	1 N 20	18 N 42	0 S 26	21 N 47
20	2 35	14 14	7 28	11 17	1 21	19 20	0 25	21 49
24	1 48	15 3	7 5	11 45	1 22	19 57	0 24	21 51
28	0 55	16 0	6 45	12 16	1 23	20 33	0 24	21 53

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	14 Aq 0	6 Aq 30	18 Ta 59	11 Ge 36	22 Ta 9	26 Ta 25	0.90
17	13 R 18	R 13	19 33		38 12	26 11	1.92
18	12 44		0 20 7		41 15	26 11	2.93
19	12 14	5 48	41		44 18	27 11	3.91
20	11 54	39 21	15		47 21	28 11	4.86
21		41	32	49	50 24	29 11	5.78
22	11 D 42		28 22	23	53 27	30 11	6.70
23		48 D 26	57		56 30	31 11	7.61
24	12 1		27 23	31	59 33	32 11	8.51
25		2	30 24	5 12	3 36	33 11	9.42
26		22	36	40	7 40	34 11	10.35
27		46	45 25	15	11 44	35 11	11.29
28	13 15	5 56	25 50	12 15	22 48	26 36	12.25

Date.	Saturn.		Uranus.		Neptune.		Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.
16	2 S 2	16 N 22	0 S 12	19 N 11	1 N 20	1 N 30	29 Vi 22
20		1 25		11 "		32	15 11
24		0 29		19 12	1 N 21	34	9 13 58
28	1 S 59	34 "		13 "		36	5 46

Date.	Sid. Time,			SUN.		MOON.					
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.			
1 Su.	22	7	4	10 Pi	3 7 S	48 18 Le	45 2 S	12 13 N	4		
2 M.	11	1	1	1	3	25 1 Vi	39 1	2 9	48		
3 Tu.	14	57	12	3		02 15	13 0 N	11 5	48		
4 W.	18	54	13	3 6		39 28	57 1	25 1	46		
5 Th.	22	50	14	3		16 12 Li	46 2	33 2 S	39		
6 F.	26	47	15	3 5		53 26	52 3	35 6	56		
7 Sa.	30	43	16	3		30 11 Sc	2 4	26 10	47		
8 Su	34	40	17	3		07 25	13 4	58 14	5		
9 M.	38	37	18	3 4		44 9 Sa	28 5	13 16	36		
10 Tu	42	34	19	3		20 23	40 5	10 17	58		
11 W.	46	30	20	3 3		57 7 Ca	48 4	47 18	23		
12 Th.	50	27	21	3		33 21	47 4	6 17	29		
13 F.	54	23	22	3		10 5 Aq	40 3	12 15	39		
14 Sa.	58	20	23	3 2		46 19	24 2	9 12	54		
15 Su.	23	2	17	24	3	23 2 Pi	55 1	0 9	27		
16 M.	6	13	25	2 2		0 16	18 0 S	14 5	37		

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	0 N 41	16 S 0	6 N 36	12 S 20	1 N 23	20 N 40	0 S 23	21 N 55
5	7 15	50	0	28	24 21	2	23	57
9	0 S 42	15 21	5 21	38	24	44	22 22	0
13	1 17	14 16	4 43	50	25 22	15	22	4
16	39 13	20	16	48	25	32	21	8

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	13 Aq 55	6 Aq 6	26 Ta 25	12 Ge 19	22 Ta 53	26 Ta 38	13.23
2	14 34	25 27	0	24	57	40	14.22
3	15 16	42 27	35	29 23	1	42	15.26
4	16 3 7	0 28	10	34	5	43	16.32
5	16 51	20	45	39	9	45	17.39
6	17 49	43 29	20	44	14	47	18.48
7	18 43 8	7	55	50	18	48	19.58
8	19 42	34 0 Ge	30	56	22	49	20.68
9	20 43 9	1 1	5 13	2	26	51	21.79
10	21 49	31	40	9	31	53	22.89
11	22 57 10	2 2	15	16	36	54	23.98
12	24 5	35	51	23	41	55	25.06
13	25 15 11	8 3	27	30	46	57	26.13
14	26 29	44 4	3	37	51	59	27.19
15	27 45 12	20	39	44	56 27	0	28.24
16	29 2 12	58 5	15 13	51 24	1 27	2	29.27

Date.	Saturn.		Uranus.		Neptune.			Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	1 S 58	16 N 36	0 S 11	19 N 13	1 N 21	1 N 38	29 Vi 4	13 Vi 43
5	0 57	41	"	15	"	41 28 R	7	30
9	56	46	"	16	"	44	50	17
13	55	51	"	18	"	46	43	5
16	54	57	"	19	"	48	38 12 Vi	56

Date.	Sid. Time.			SUN.		MOON.					
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.			
16 M.	23	6	13	25 Pi	2 2 S	0 16 Pi	18 0 S	14 5 S	37		
17 Tu.	10	10	26		2 1	36 29	21 1	28 1	40		
18 W.	14	6	27		2	13 12 Ar	7 2	33 2 N	29		
19 Th.	18	3	28		2 0	49 24	48 3	30 6	21		
20 F.	22	0	29			26 7 Ta	1 4	15 9	48		
21 Sa.	25	56	0	Ar	1	3 19	3 4	45 12	52		
22 Su.	29	53	1		0 0 N	20 1 Ge	15 5	8 15	20		
23 M.	33	49	2		0	43 13	9 5	14 17	7		
24 Tu.	37	46	2		59 1	6 25	1 5	7 18	9		
25 W.	41	43	3		59	30 6 C	58 4	48 18	22		
26 Th.	45	39	4		58	54 19	2 4	16 17	47		
27 F.	49	36	5		58 2	18 1 Li	17 3	30 16	22		
28 Sa.	53	33	6		57	42 13	46 2	36 14	9		
29 Su.	57	29	7		56 3	6 26	39 1	31 11	11		
30 M.	0	1	25	8	55	30 9 Vi	55 0	18 7	31		
31 Tu.	5	21	9		55 3 N	54 23	38 0 N	57 3	25		

Date.	Mercury.		Venus.		March.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	1 S 39	13 S 20	4 N 16	12 S 48	1 N 25	22 N 32	0 S 21	22 N 8
20	1 58 11	7 3 44		30	26	56	"	12
24	2 13 9	18	12	9	26 23	20	20	16
28	2 7	29 2 38 11	45		27	44	"	20
31	2 S 22	5 35	2 N 12	18	27 23 N 57	0 S 19	22 N 24	

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	29 Aq 2	12 Aq 58	5 Ge 15	13 Ge 51	24 Ta 1	27 Ta 2	29.27
17	0 Pi 20	13 37	51	58	6	4	0.27
18	1 42 14	16 6	27 14	5	12	6	1.26
19	3 3	56 7	3	12	17	8	2.23
20	4 46 15	39	39	19	22	10	3.17
21	5 51 16	23 8	15	26	28	13	14.09
22	7 15 17	6	51	34	33	15	5.01
23	8 43	52 9	27	42	39	18	5.93
24	10 15 18	38 10	3	50	44	21	6.84
25	11 46 19	24	39	58	50	24	7.75
26	13 19 20	12 11	15 15	6	56	26	8.67
27	14 53 21	0	51	14 25	2	28	9.61
28	16 28	50 12	27	23	8	31	10.57
29	18 52 22	40 13	3	32	14	33	11.56
30	19 43 23	30	39	41	20	35	12.58
31	21 21 24	22 14	15	50 25	26	38	13.64

Date.	Saturn.		Uranus.		Neptune.			Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
16	1 S 54	16 N 36	0 S 11	19 N 18	1 N 21	1 N 48	28 Vi 38	12 Vi 56
20	"	17 3	"	21	"	51	R 31	43
24	53	9	"	23	"	53	23	30
28	"	15	"	25	"	55	17	17
31	52	20	"	27	"	57	13	8

Date.	Sid. Time.			SUN.				MOON.			
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	Long.	Lat.	Decl.
1 W.	0	9	18	10 Ar 54	4 N 37	7 Li 36	2 N 9	1 S 3			
2 Th.		13	15	11 53		40 21	55 3	16 5	26		
3 F.		17	11	12 52	5	3 6 Sc	27 4	9 9	39		
4 Sa.		21	8	13 51		26 21	8 4	48 13	19		
5 Su.		25	4	14 50		49 5 Sa	44 5	8 16	6		
6 M.		29	1	15 49	6	12 20	15 5	14 17	48		
7 Tu.		32	57	16 48		35 4 Ca	40 4	49 18	34		
8 W.		36	54	17 47		58 18	47 4	13 17	53		
9 Th.		40	50	18 46	7	21 2 Aq.	32 3	23 16	15		
10 F.		44	57	19 45		44 16	7 2	21 13	43		
11 Sa.		48	43	20 44	8	6 29	29 1	14 10	28		
12 Su.		52	40	21 43		27 12 Pi	41 0	3 6	47		
13 M.		56	37	22 42		48 25	32 1 S	9 2	51		
14 Tu.	1	0	33	23 41	9	10 8 Ar	12 2	14 1 N	14		
15 W.		4	30	24 40		31 20	50 3	11 5	11		
16 Th.	1	8	26	25 38	9	52 3 Ta	11 3	59 8	49		

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	2 S 21	4 S 55	2 N 5	11 S 8	1 N 27	24 N 1	0 S 19	22 N 25
5	2 14	1 27	1 37	10 24	"	14 0	18	29
9	1 57	1 N 53	9 9	33	"	27	"	33
13	1 32	4 29	0 41	8 34	26	39 0	17	37
16	1 9	7 7	0 27	7 45	"	43	"	22 N 41

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	23 Pi	1 25 Aq	14 14 Ge	51 14 Ge	59 25 Ta	32 27 Ta	40 14.72
2	24	44 26	7 15	27 16	8	38	43 15.84
3	26	27 27	0 16	3	17	44	46 16.97
4	28	12	53	39	26	51	48 18.11
5	29	58 28	49 17	15	36	57	51 19.24
6	1 Ar	44 29	43	51	46 26	4	54 20.37
7	3	32 0 Pi	39 18	27	56	11	56 21.49
8	5	23 1	35 19	3 17	6	18	59 22.59
9	7	16 2	31	39	16	25 28	2 23.65
10	9	10 3	28 20	15	26	32	5 24.70
11	12	6 4	25	52	36	39	8 25.73
12	13	0 5	23 21	28	46	46	10 26.75
13	14	57 6	20 22	5	56	53	15 27.74
14	16	58 7	20	41 18	6 27	10	18 28.71
15	19	0 8	20 23	18	17	7	21 29.68
16	21	2 9	20 23	54 18	28 27	14 28	14 0.63

Date.	Saturn.		Uranus		Neptune.			Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	
1	1 S 52	17 N 21	0 S 11	19 N 27	1 N 21	1 N 58	28 Vi 11	12 Vi 5
5	1 S 51	28	"	30	"	2	1 R 4	11 53
9	50	35	"	33	"	3 27	57	40
13	49	42	"	36	"	5	50	27
16	"	48	"	39	"	7	45	17

Date.	Sid. Time.			SUN.				MOON.				
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	Long.	Lat.	Decl.	
16 Th.	1	8	26	25 Ar 38	9 N 52	3 Ta 11	3 S 59	8 N 49				
17 F.		12	23	26 37	10 14	15 23	4 33	12 4				
18 Sa.		16	19	27 36	35 27	29 4	55 14	43				
19 Su.		20	16	28 34	56 9	Ge 24	5 7	14 46				
20 M.		24	12	29 33	11 18	21 18	5 4	18 5				
21 Tu.		28	9	0 Ta 32	39 3	C 8	4 48	18 31				
22 W.		32	5	1 30	12 0	15 4	4 19	18 14				
23 Th.		36	2	2 29	20 27	3 3	38 17	6				
24 F.		39	59	3 27	40 9	Le 14	2 44	15 10				
25 Sa.		43	55	4 25	13 0	21 46	1 45	12 33				
26 Su.		47	52	5 24	19 4	Vi 34	0 41	9 10				
27 M.		51	48	6 22	39 17	53 0	N 32	5 23				
28 Tu.		55	44	7 20	58 1	Li 37	1 41	0 55				
29 W.		59	41	8 19	14 16	15 44	2 50	3 S 34				
30 Th.	2	3	38	9 17	34 0	Sc 23	3 48	8 0				

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	1 S 9	7 N 7	0 N 27	7 S 45	1 N 26	24 N 43	0 S 17	22 N 41
20	0 40	10 38	1 6	37	" "	47	16	45
24	0 N 8	14 21	0 S 23	5 23	" "	50	"	49
28	0 51	18 6	43 4	0	" "	53	15	53
31			"		"		"	

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	21 Ar 2	9 Pi 20	23 Ge 54	18 Ge 28	27 Ta 14	28 Ta 24	0.63
17	23 6	10 20	24 31	39 21	27		1.56
18	25 10	11 20	25 7	50 28	30		2.49
19	27 15	12 20	44 19	1 35	33		3.40
20	29 21	13 20	26 20	12 42	37		4.31
21	1 Ta 28	14 21	57 23	49 40			5.22
22	3 36	15 22	27 33	34 56	43		6.13
23	5 45	16 24	28 10	45 28	3		7.05
24	7 54	17 26	46 56	11 50			7.98
25	10 3	18 28	29 23	20 8	18		8.94
26	12 11	19 30	59 20	25 56			9.93
27	14 19	20 32	0 Ca 36	32 33			10.96
28	16 26	21 35	1 13	44 40	29		12.02
29	18 31	22 38	50 56	47 5			13.12
30	20 34	23 43	2 26	21 8	28 55		14.26

Date.	Saturn.		Uranus.		Neptune.		Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	
16	1 S 49	17 N 48	0 S 11	19 N 39	1 N 21	2 N 7	27 Vi 45
20	48	55	"	42	"	9 R	41 05
24	48	18 2	"	45	"	11	35 10 52
28	47	8	"	48	"	13	32 39

Date.	Sid. Time.			SUN.		MOON.			
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	
1 F.	2	7	34	10 Ta	15 14 N	53 15 Sc	15 4 N	32 12 S	0
2 Sa.		11	31	11	13 15	10 0 Sa	18 4	57 15	17
3 Su.		15	27	12	12 15	27 15	22 5	1 17	32
4 M.		19	24	13	10	45 0 Ca	17 4	45 18	31
5 Tu.		23	20	14	8 16	2 14	52 4	11 18	35
6 W.		27	17	15	5	19 29	10 3	25 17	13
7 Th.		31	14	16	4	36 13 Aq	2 2	26 14	31
8 F.		35	10	17	2	53 26	33 1	19 11	27
9 Sa.		39	7	18	0 17	10 9 Pi	42 0	9 7	49
10 Su.		43	3	18	58	27 22	35 1 S	2 3	53
11 M.		47	0	19	56	43 5 Ar	10 2	5 0 N	11
12 Tu.		50	56	20	54	59 17	38 3	2 4	8
13 W.		54	53	21	52 18	14 29	57 3	48 7	48
14 Th.		58	49	22	50	29 12 Ta	5 4	24 11	11
15 F.	3	2	46	23	48	43 24	8 4	46 14	6
16 Sa.		6	42	24	46 18	57 6 Ge	7 4	57 16	21

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	1 N 22	19 N 42	0 S 55	2 S 56	1 N 25	24 N 51	0 S 15	22 N 56
5	1 50	22 27	1 11	1 39	„	42	14	59
9	2 15	23 41	18 0	7	„	34	„	23 2
13	2 28	24 46	37 1 N	35	1 24	26	13	5
16	2 25	25 10	45 2	45	„	14	„	8

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	22 Ta 30	24 Pi 46	3 C	3 21 Ge	20 29 Ta	3 29 Ta	11 15.42
2	24 28	25 51	40	32	10	14	16.59
3	26 23	26 54	4 16	44	17	18	17.78
4	28 18	27 58	53	56	25	21	18.93
5	0 Ge	8 29	5 5	29 22	8	32	25 20.06
6	1 54	0 Ar	9 6	6	20	39	28 21.17
7	3 40	1 14	42	32	47	32	22.25
8	5 20	2 19	7 9	45	54	35	23.29
9	6 57	3 25	56	56	0 Ge	2	39 24.31
10	8 33	4 29	8 32	23	11	10	42 25.30
11	10 1	5 36	9 9	24	18	46	26.27
12	11 28	6 42	45	37	26	50	27.23
13	12 50	7 49	10 22	50	34	54	28.18
14	14 9	8 55	58 24	3	41	57	29.11
15	15 24	10 11	35	16	49	0 Ge	1 0.03
16	16 35	11 7	12 11	29	56	4	0.95

Date.	Saturn.		Uranus.		Neptune.		Nodc.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	1 S 47	18 N 14	0 S 10	19 N 49	1 N 21	2 N 14	27 Vi 28	10 Vi 29
5	46	20	„	52	„	15 R	24	17
9	„	26	„	55	20	16	20	04
13	„	32	„	58	„	17	16	9 51
16	45	8	„	20 N 0	„	18	14	42

Date.	Sid. Time.			SUN.		MOON.			
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	
16 Sa.	3	6	42	24 Ta	46 18 N	57 6 Ge	7 4 S	57 16 N	21
17 Su.		10	39	25	44 19	10 18	2 4	58 17	54
18 M.		14	36	26	41	23 29	51 4	41 18	53
19 Tu.		18	32	27	39	36 11 C	39 4	13 18	40
20 W.		22	29	28	37	49 23	35 3	37 17	46
21 Th.		26	25	29	35 20	2 5 Le	34 2	49 16	5
22 F.		30	22	0 Ge	32	15 17	45 1	54 13	39
23 Sa.		34	18	1	30	28 0 Vi	14 0	48 10	37
24 Su.		38	15	2	28	39 12	53 0 N	19 7	2
25 M.		42	11	3	26	50 26	12 1	28 2	53
26 Tu.		46	8	4	29 21	0 9 Li	52 2	33 1 S	35
27 W.		50	4	5	21	10 23	57 3	34 6	0
28 Th.		54	1	6	18	20 8 Sc	35 4	19 10	14
29 F.		57	57	7	15	29 23	33 4	49 13	55
30 Sa.	4	1	55	8	13	38 8 Sa	50 4	58 16	44
31 Su.	4	5	51	9	11 21	47 24	8 4	46 18	22

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	2 N 25	25 N 10	1 S 45	2 N 45	1 N 24	24 N 14	0 S 13	23 N 8
20	2 11 25	3 1	53 4	18	1 23 23	58	12	11
24	1 47 24	46 2	0 5	55	„	42	„	13
28	0 51 24	12 2	4 7	36	1 22	22	11	15
31	0 11 23	32 2	8 8	44	1 21	4	„	16

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	16 Ge 35	11 Ar 7	12 C 11	24 Ge 29	0 Ge 56	0 Ge 4	0.95
17	17 42 12	14	48	42 1	4	7	1.86
18	18 44 13	21 13	25	55	11	11	2.76
19	19 42 14	28 14	2 25	8	19	14	3.67
20	20 37 15	35	39	21	26	18	4.58
21	21 27 16	41 15	16	34	34	21	5.50
22	22 13 17	48	53	47	41	25	6.43
23	22 54 18	56 16	30 26	0	49	28	7.40
24	23 30 20	3 17	7	13	57	32	8.38
25	24 3 21	10	44	26 2	5	35	9.40
26	24 29 22	17 18	21	39	13	39	10.46
27	24 52 23	25	58	52	21	42	11.56
28	25 12 24	33 19	35 27	5	29	46	12.69
29	25 26 25	41 20	12	18	37	49	13.86
30	25 34 26	50	49	31	45	53	15.05
31	25 38 27	59 21	26 27	44 2	53 0	57	16.25

Date.	Saturn.		Uranus.		Neptune.		Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.
16	1 S 45	18 N 38	0 S 10	20 N 0	1 N 20	2 N 18	27 Vi 14
20	„	44	„	3	„	19	12 38
24	„	51	„	5	„	20	10 17
28	1 S 44	58	„	8	„	21	8 04
31		19 N 4	„	11	„	22	6 8 Vi 54

Date.	Sid. Time.			SUN.		MOON.		
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.
1 M.	4	9	48	10 Ge	8 21 N	56 9 Ca	20 4 N	16 18 S
2 Tu.		13	45	11	5 22	3 24	11 3	28 17
3 W.		17	41	12	2	12 8 Aq	37 2	29 15
4 Th.		21	38	13	0	21 22	43 1	22 12
5 F.		25	35	13	57	29 6 Pi	14 0	11 9
6 Sa.		29	31	14	55	36 19	27 0 S	58 5
7 Su.		33	28	15	52	43 2 Ar	16 2	3 0
8 M.		37	24	16	49	49 14	48 3	2 3 N
9 Tu.		41	21	17	47	54 27	9 3	48 6
10 W.		45	17	18	44	59 9 Ta	11 4	23 10
11 Th.		49	14	19	41 23	3 21	8 4	47 13
12 F.		53	11	20	39	7 3 Ge	6 4	59 15
13 Sa.		57	7	21	36	11 15	1 4	57 17
14 Su.	5	1	4	22	34	15 26	53 4	45 18
15 M.		5	0	23	31	18 8 C	44 4	15 18
16 Tu.		8	57	24	28 23	21 20	39 3	37 18

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	0 S	8 23 N	5	2 S	8 9 N	18	1 N	21 22 N
5	1	11 21	57	2	10 10	39	20	32
9	2	19 20	48	..	12 11	..	4	0 S
13	3	22 19	40		8 13	43	19 21	32
16	3	56 19	5		6 14	45	18	7

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	25 Ge	36 29 Ar	8 22 C	2 27 Ge	57 3 Ge	0 1 Ge	0 17.43
2	R	31 0 Ta	16	39 28	10	8	4 18.59
3		22 1	24 23	16	23	15	7 19.72
4		10 2	33	53	37	23	11 20.81
5	24	53 3	42 24	30	50	30	14 21.86
6		34 4	50 25	7 29	4	38	18 22.88
7		7 5	59	44	17	46	21 23.87
8	23	41 7	8 26	21	31	53	24 24.83
9		10 8	18	58	45 4	1	27 25.78
10	22	40 9	27 27	35	59	8	30 26.70
11		8 10	36 28	12 0 C	13	16	34 27.62
12	21	34 11	45	49	27	23	37 28.54
13		0 12	54 29	26	40	30	41 29.45
14	20	28 14	4 0 Le	03	54	37	44 0.35
15	19	55 15	14	40 1	8	45	47 1.27
16	19	23 16	23 1	17	21	53	51 2.18

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	1 S	44 19 N	5	0 S	10 20 N	11	1 N	20 2 N
5	..	11	..	14	..	..	R	6
9	..	16	..	17	..	..	..	..
13	..	21	..	20	19	21	D	13
16	..	26	..	22	..	..	7	8

Date.	Sid. Time.			SUN.		MOON.					
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.			
16 Tu.	5	8	57	24 Ge	28 23 N	21 20 C	39 3 S	37 18 N	12		
17 W.		12	53	25	26	23 2 Le	35 2	49 16	48		
18 Th.		16	50	26	23	25 14	41 1	55 14	43		
19 F.		20	47	27	20	26 26	55 0	54 11	43		
20 Sa.		24	43	28	17	27 9 Vi	21 0 N	14 8	15		
21 Su.		28	39	29	15	26 22	5 1	22 4	22		
22 M.		32	36	0 C	12	25 5 Li	25 2	25 0	11		
23 Tu.		36	33	1	9	24 18	49 3	24 4 S	1		
24 W.		40	29	2	6	23 2 Sc	45 4	13 8	24		
25 Th.		44	26	3	4	22 17	14 4	46 12	23		
26 F.		48	22	4	1	21 2 Sa	10 5	2 15	31		
27 Sa.		52	19	4	58	19 17	18 4	57 17	44		
28 Su.		56	15	5	55	17 2 Ca	35 4	31 18	46		
29 M.		0	12	6	52	15 17	45 3	45 18	25		
30 Tu		4	8	7	50 23 N	13 2 Aq	47 2	45 16	45		

Date.	Mercury		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	3 S	56 19 N	5 2 S	6 14 N	45 1 N	18 21 N	7 0 S	8 23 N
20	4	15 18	50 2	2 15 58	1 17	20 33	„	17
24		32	38 1	58 17	13 1	16 19	57 0 S	7 16
28		15	43 1	53 18	29 1	15	17	„ 23 15

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars..	Jupiter.	Saturn.	Uranus.	
16	19 Ge 23	16 Ta 23	1 Le 17	1 C 21	4 Ge 53	1 Ge 51	2.18
17	18	53 17	33	54	35 5	00	54 3.10
18		28 18	43 2	31	49	08	58 4.02
19		05 19	52 3	08 2	03	15 2	01 4.97
20	17	44 21	01	45	16	22	05 5.93
21		28 22	11 4	22	30	29	08 6.90
22		14 23	21	59	43	36	12 7.92
23		06 24	31 5	36	57	44	15 8.97
24		02 25	41 6	13 3	10	51	18 10.05
25	D	02 26	51	51	24	59	21 11.18
26		05 28	01 7	28	37 6	06	24 12.35
27		17 29	12 8	05	51	14	27 13.53
28		32 0 Ge	23	44 4	04	21	30 14.72
29		52 1	33 9	22	18	30	32 15.91
30	18	17 2	44 10	00	32	38	35 17.08

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
16	1 S	44 19 N	26 0 S	10 20 N	22 1 N	19 2 N	21 27 Vi	07 8 Vi
20	„	31	„	25	„	„	08	7 51
24	„	36	„	27	„	20	10	38
28	„	41	„	30	„	„	13	7 25

Date.	Sid. Time.			SUN.		MOON,			
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	
1 W.	12	6	8	5 8 C	47 23 N	10 17 Aq	19 1 N	35 14 S	00
2 Th.	12	12	2	9 44	7 1 Pi	35 0	21 10	31	
3 F.	12	58	10	41	3 15	12 0 S	50 6	37	
4 Sa.	19	55	11	38 22 N	59 28	31 1	59 2	28	
5 Su.	23	51	12	36	54 11 Ar	8 2	58 1 N	45	
6 M.	27	48	13	33	49 23	54 3	48 5	43	
7 Tu.	31	45	14	30	44 6 Ta	4 4	26 9	18	
8 W.	35	41	15	27	38 18	13 4	50 12	31	
9 Th.	39	38	16	24	32 0 Ge	10 5	05 15	07	
10 F.	43	35	17	22	25 12	00 5	02 17	10	
11 Sa.	47	31	18	19	18 23	51 4	47 18	21	
12 Su.	51	28	19	16	11 5 C	47 4	23 18	50	
13 M.	55	25	20	13	3 17	40 3	46 18	27	
14 Tu.	59	21	21	11 21 N	55 29	40 2	58 17	17	
15 W.	7	3	18 22	8	46 1 Le	45 2	01 15	16	
16 Th.	7	14	23	5	36 24	03 0	57 12	35	

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	3 S	52 19 N	07	1 S	46 19 N	16	1 N	14 18 N
5	3	03 20	02	38 20	1	13	07	6
9	2	28	58	29	49	12 17	24	10
13	1	34 21	54	20 21	40	11 16	36	7
16	0	53 22	30	13 22	03	10 15	52	4

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	18 Ge	46 3	Ge 54	10 Le	34 4 C	45 6 Ge	45 2 Ge
2	19	20 5	05 11	11	59	52	40
3	19	58 6	15	48 5	13	59	43
4	20	42 7	26 12	26	26 7	06	46
5	21	30 8	37 13	3	40	12	49
6	22	23 9	47	40	54	19	51
7	23	20 10	58 14	18 6	07	26	54
8	24	22 12	09	55	21	33	57
9	25	26 13	20 15	32	35	40 3	00
10	26	37 14	31 16	10	48	47	2
11	27	50 15	41	47 7	01	54	5
12	29	11 16	52 17	28	15 8	01	8
13	0 C	35 18	04 18	05	38	07	11
14	2	02 19	16	42	52	13	14
15	3	32 20	27 19	19 8	06	19	16
16	5	08 21	38	57	20	25	18

Date.	Saturn.		Uranus.		Neptune.		Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	
1	1 S	44 19 N	45	0 S	10 20 N	31 1 N	19 2 N
5	"	49	"	4	"	18	17
9	"	53	"	36	"	15	22
13	1 S	45	57	"	38	"	14
16	"	20 01	"	40	"	12	29

Date.	Sid. Time.			SUN.		MOON.					
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.			
16 Th.	7	7	14	23 C	05 21 N	36 24 Le	03	0 S	57	12 N	35
17 F.		11	11	24	02	27 6 Vi	25	0 N	10	9	16
18 Sa.		15	8	25	00	15 19	00	1	18	5	33
19 Su.		19	04	25	57	03 1 Li	51	2	21	1	28
20 M.		23	01	26	54 20	51 15	15	3	18	2 S	50
21 Tu.		26	57	27	51	39 28	34	4	09	7	00
22 W.		30	54	28	49	27 12 Sc	26	4	45	11	00
23 Th.		34	50	29	46	15 26	42	5	06	14	23
24 F.		38	7	0 Le	44	03 11 Sa	20	5	08	16	55
25 Sa.		42	43	1	41 19	51 26	09	4	50	18	25
26 Su.		46	39	2	38	39 11 Ca	10	4	10	18	45
27 M.		50	36	3	35	26 26	07	3	12	17	40
28 Tu.		54	33	4	33	12 11 Aq	05	2	05	15	23
29 W.		58	30	5	30 18	58 25	34	0	48	12	11
30 Th.	0	02	06	6	27	43 9 Pi	48	0 S	29	8	20
31 F.	8	06	23	7	25 18	28 23	31	1	43	4	15

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	0 S	53	22 N	30	1 S	13	22 N	03
20		59		38		03		32
24	1	06	49	0	54	38	08	14
28		17	21	47	43	41	07	13
31		33	20	41	32	32	06	12

Date.	LONGITUDES.											TITHI.	
	Mercury.		Venus.		Mars.		Jupiter.		Saturn.		Uranus.		
16	5C	08	21 Ge	38	19 Le	57	8 C	20	8 Ge	25	3 Ge	18	2.58
17	6	45	22	50	20	34		34		31		20	3.53
18	8	29	24	01	21	12		47		37		22	4.50
19	10	14	25	13		49	9	00		43		25	5.49
20	12	03	26	25	22	26		14		49		27	6.53
21	13	57	27	36	23	04		27		55		29	7.58
22	15	50	28	48		41		40	9	01		32	8.63
23	17	48	29	59	24	19		52		07		34	9.75
24	19	46	1 C	11		56	10	04		13		37	10.88
25	21	47	2	23	25	34		16		19		39	12.04
26	23	49	3	35	26	11		28		25		41	13.21
27	25	52	4	47		49		40		31		43	14.38
28	27	56	5	59	27	27		52		37		46	15.55
29	0 Le	01	7	10	28	04	11	04		42		48	16.68
30	2	13	8	22		42		16		47		50	17.78
31	3	20	9	34	29	20		28		52		53	18.84

Date.	Saturn.		Uranus.		Neptune.			Node.
	Lat.	Decl.	Lat,	Decl.	Lat.	Decl.	Long.	Long.
16	1 S 45	20 N 01	0 S 10	20 N 40	1 N 18	2 N 12	27Vi 29	6Vi 28
20	„	4	„	42	„	10	33	16
24	„ 46	7	„	44	„	08	38	03
28	„	10	„	45	„	06	43	5 51
31	„	13	„	46	„	04	48	40

Date.	Sid. Time.			SUN.				MOON.					
	H.	M.	S.	Long.		Decl.		Long.		Lat.		Decl.	
1 Sa.	8	10	19	8 Le	22	18 N	13	6 Ar	50	2 S	50	0 N	8
2 Su.		14	16	9	19	17	58	19	51	3	44	4	19
3 M.		18	13	10	17		43	2 Ta	25	4	26	8	4
4 Tu.		22	09	11	14		28	14	41	4	55	11	31
5 W.		26	06	12	12		13	26	49	5	11	14	20
6 Th.		30	03	13	09	16	58	8 Ge	44	5	16	16	29
7 F.		34	00	14	07		43	20	34	5	03	18	00
8 Sa.		37	56	15	04		27	2 C	28	4	39	18	42
9 Su.		41	53	16	02		10	14	22	4	00	18	37
10 M.		45	49	16	59	15	52	26	24	3	14	17	39
11 Tu.		49	45	17	57		34	8 Le	33	2	17	15	40
12 W.		53	42	18	54		16	20	56	1	13	13	22
13 Th.		57	38	19	52	14	57	3 Vi	21	0	06	10	11
14 F.	9	1	34	20	50		38	16	02	1 N	04	6	30
15 Sa.		5	31	21	47		19	28	55	2	10	2	25
16 Su.		9	28	22	45	14	00	12 Li	01	3	14	1 S	45

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	1 N 38	20 N 13	0 S 30	22 N 30	1 N 6	12 N 32	0 S 4	22 N 51
5	1 45	17 40	18	09	5 11	37	„	48
9	1 41	15 12	07 21	44	4 10	41	0 S 3	44
13	1 34	12 48	0 N 05	10	2 9	43	„	40
16	1 18	10 36	0 13	20 36	1 9	01	„	36

Date.	LONGITUDES.						TITHI.
	Mercurv.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	6 Le 30	10 Ca 46	29 Le 58	11 C 40	9 Ge 57	3 Ge 55	19.87
2	8 36	11 58	0 Vi 35	52 10	02 57		20.87
3	10 41	13 10	1 12	12 04	07 58		21.84
4	12 45	14 23	2 50	16 42	12 00		22.79
5	14 43	15 36	2 28	28 17	01 23		23.72
6	16 45	16 48	3 06	40 22	03 24		24.63
7	18 44	18 00	4 44	52 26	05 25		25.54
8	20 42	19 13	4 22	13 04	31 07		26.45
9	22 39	20 25	5 00	16 32	36 08		27.36
10	24 35	21 38	5 38	28 40	10 28		28.29
11	26 30	22 51	6 16	40 45	12 29		29.22
12	28 24	24 04	7 54	52 49	13 0		0.17
13	0 Vi 16	25 17	7 32	14 04	54 15		1.12
14	2 08	26 29	8 10	16 58	06 2		2.10
15	4 00	27 42	8 48	28 11	02 17		3.10
16	5 50	28 53	9 26	14 40	06 4		4.12

Date.	Saturn.		Uranus.		Neptune.			Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	1 S 47	20 N 20	0 S 10	20 N 46	1 N 18	2 N 03	27Vi 49	5Vi 37
5	„	21	„	47	„	01	56	25
9	„	22	„	48	„	1 N 58	28 03	12
13	„ 48	23	„	49	„ 17	55	11	4 59
16	„	24	„	50	„	52	17	49

Date.	Sid. Time.			SUN.				MOON.					
	H.	M.	S.	Long.		Decl.		Long.		Lat.		Decl.	
16 Su.	9	9	28	22 Le	45	14 N	00	12 Li	01	3 N	14	1 S	45
17 M.		13	24	23	43	13	41	25	23	4	05	5	56
18 Tu.		17	21	24	40		22	9 Sc	00	4	45	10	01
19 W.		21	17	25	38		03	22	58	5	10	13	24
20 Th.		25	14	26	36	12	43	7 Sa	04	5	15	16	10
21 F.		29	10	27	34		23	21	21	5	03	18	00
22 Sa.		33	07	28	31		03	5 Ca	54	4	30	18	41
23 Su		37	04	29		29 11	43	20	29	3	41	18	10
24 M.		41	01	0 Vi	27		22	5 Aq	05	2	35	16	27
25 Tu.		44	58	1	25		01	19	32	1	22	13	39
26 W.		48	54	2	23	10	40	3 Pi	51	0	05	10	02
27 Th.		52	51	3	21		19	17	53	1 S	13	5	56
28 F.		56	47	4	19	9	59	1 Ar	33	2	24	1	37
29 Sa.	10	0	43	5	17		38	14	52	3	26	2 N	40
30 Su.		4	39	6	15		17	28	04	4	13	6	42
31 M.		8	36	7	13	8	56	10 Ta	28	4	49	10	20

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	1 N 18	10 N 36	0 N 13	20 N 36	1 N 01	9 N 01	0 S 3	22 N 36
20	0 58	7 05		22 19 27	1 00	8 06	2	31
24	31 4	01	32 18	23 0	58 7	04	„	26
28	02 1	45	42 17	25	57 6	00	„	21
31	0 S 28	0 S 22	49 16	31	56 5	13	1	16

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	5 Vi 50	28 C: 55	9 Vi 26	14 C. 40	11 Ge 06	4 Ge 18	4.12
17	7 36	0 Le 08	10 04	52	10	19	5.15
18	9 20	1 21	42 15	04	14	21	6.20
19	11 03	2 34	11 20	16	18	22	7.28
20	12 45	3 47	58	28	22	23	8.37
21	14 25	5 00	12 37	40	26	24	9.48
22	16 04	6 13	13 15	52	30	26	10.63
23	17 40	7 26	54 16	04	34	27	11.76
24	19 15	8 39	14 32	16	37	28	12.89
25	20 52	9 52	15 10	28	40	29	14.01
26	22 23	11 05	48	40	43	30	15.12
27	23 59	12 18	16 26	52	46	30	16.21
28	25 28	13 33	17 04	17 04	49	31	17.21
29	26 58	14 47	43	16	52	32	18.30
30	28 26	16 01	18 21	28	55	32	19.32
31	29 54	17 15	19 00	17 39	58	33	20.27

Date.	Saturn.		Uranus.		Neptune.			Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
16	1 S 48	20 N 13	0 S 10	20 N 50	1 N 17	1 N 52	28 Vi 17	4 Vi 49
20	„	15	„	51	„	49	24	36
24	49	17	„	52	„	46	32	23
28	„	19	„	53	„	43	40	11
31	50	20 N 20	„	20 N 53	„	1 N 40	28 Vi 46	4 Vi 02

Date.	Sid. Time.			SUN.		MOON.		
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.
1 Tu	10	12	32	8 Vi 11	8 N 35	22 Ta 47	5 S 10	12 N 50
2 W.		16	29	9 09		14 4 Ge 54	5 16	15 48
3 Th.		20	25	10 07	7 52	16 52	5 10	17 35
4 F.		24	22	11 05		30 28 45	4 49	18 32
5 Sa.		28	18	12 03		08 10 C 41	4 17	18 41
6 Su.		32	15	13 01	6 45	22 36	3 39	18 02
7 M.		36	11	13 59		22 4 Le 41	2 38	16 34
8 Tu.		40	08	14 58	5 59	16 56	1 36	14 13
9 W.		44	04	15 56		36 29 30	0 28	11 14
10 Th.		48	01	16 54		13 12 Vi 17	0 N 43	7 40
11 F.		51	57	17 53	4 50	25 1	1 55	3 35
12 Sa.		55	53	18 52		27 8 Li 37	3 00	0 S 37
13 Su.		59	50	19 50		04 22 07	3 55	4 58
14 M.	11	3	46	20 49	3 41	5 Sc 54	4 37	9 03
15 Tu.		7	43	21 47		18 19 48	5 04	12 44
16 W.		11	39	22 46	2 55	3 Sa 51	5 16	15 41

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	0 S 38	1 S 05	0 N 52	16 N 08	0 N 55	4 N 57	0 S 12	22 N 15
5	1 12	3 47		59 14	27 54	3 56	0 0	11
9	1 46	6 14	1 06	12 53		52 2 54	0 0	6
13	2 19	8 30	1 11	11 26		50 1 50	0 N 1	01
16	2 44	10 05	1 16	10 09		49 1 02	0 0	21 N 56

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	1 Li 20	18 Le 29	19 Vi 38	17 C 50	12 Ge 01	4 Ge 33	21.21
2	2 43	19 43	20 16	18 01		03 33	22.14
3	4 6	20 55		54 11		05 34	23.06
4	5 25	22 09	21 33		21 07		34 23.97
5	6 45	23 23	22 11		31 09		34 24.88
6	7 03	24 37		49 41		11 35	25.80
7	9 18	25 51	23 28		51 13		35 26.73
8	10 31	27 05	24 06	19 01		15 35	27.66
9	11 42	28 19		45 11		17 R 35	28.63
10	12 55	29 33	25 23		21 19		35 29.62
11	14 05	0 Vi 47	26 02		31 21		35 0.63
12	15 12	2 01		41 41		22 35	1.65
13	16 17	3 15	27 20		51 23		34 2.69
14	17 19	4 29		58 20	01 24		34 3.76
15	18 20	5 43	28 37		11 25		34 4.83
16	19 19	6 57	29 16	20 20	12 26		34 5.92

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	1 S 50	20 N 24	0 S 10	20 N 53	1 N 17	1 N 39	28 Vi 48	3 Vi 59
5		51 25		54		35		56 46
9		26				32	29 04	33
13		52 27				29		14 20
16		26				26		20 11

Date.	Sid. Time.			SUN.		MOON,					
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.			
16 W.	11	11	39	22 Vi 46	2 N 55	3 Sa 51	5 N 16	15 S 41			
17 Th.		15	36	23 44		32 18	01 5	05 17	44		
18 F.		19	32	24 43		09 2 Ca 12	4	38 18	41		
19 Sa.		23	29	25 42	1	46 16	25 3	53 18	20		
20 Su.		27	26	26 40		23 0 Aq 37	2	57 17	11		
21 M.		31	22	27 39	0	59 14	45 1	43 14	42		
22 Tu.		35	19	28 37		35 28	49 0	29 11	20		
23 W.		39	15	29 36		21 12 Pi 41	0 S 45	7 30			
24 Th.		43	12	0 Li 35	0 S 02	26 20	2	00 3	15		
25 F.		47	08	1 34		26 9 Ar 41	3	03 1 N 04			
26 Sa.		51	05	2 32		50 22	55 3	54 5	12		
27 Su.		55	01	3 31	1	14 5 Ta 48	4	34 9	07		
28 M.		58	57	4 30		38 18	23 5	01 12	28		
29 Tu.	12	2	54	5 29	2	02 0 Ge 25	5	12 15	10		
30 W.		6	51	6 28		26 12	49 5	07 17	12		

Date.	Mercury.		Venus.		Mars.		Jupiter,	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	2 S 44	10 S 05	1 N 16	10 N 09	0 N 49	1 N 00	0 N 0	21 N 56
20	3 9	11 44	20 8	20	48 0 S	1 0	1	50
24	3 28	12 56	1 23	6 26	46 1	3 0	2	45
28	3 42	13 26	1 26	4 31	45 1	50	2	40

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	19 Li 19	6 Vi 57	29 Vi 16	20 C 20	12 Ge 26	4 Ge 34	5.92
17	20 14 8	11 55		29	27 R 33		7.02
18	21 05 9	25 0 Li 34		38	28 33		8.12
19	21 53 10	39 1 12		47	29 33		9.22
20	22 37 11	53 51		56	30 32		10.32
21	23 19 13	07 2 30	21 05	30	32 11.41		
22	23 57 14	21 3 09	14 30	31	12.49		
23	24 30 15	35 48	23 31	31	13.57		
24	24 58 16	50 4 27	32 31	30	14.64		
25	25 23 18	05 5 06	41 R 31	30	15.68		
26	25 40 19	21 45	49 31	29	16.70		
27	25 52 20	35 6 24	57 30	28	17.69		
28	26 00 21	50 7 03	22 05	30	18.66		
29	25 R 59	22 05	42 13	30	19.61		
30	25 52 24	20 8 21	22 21	30	20.53		

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
16	1 S 52	20 N 26	0 S 10	20 N 54	1 N 17	1 N 26	29 Vi 20	3 Vi 11
20	53	"	"	"	"	23	29 2	59
24	"	"	"	53	"	19	39	46
28	54	25	"	"	"	16	48	33

Date.	Sid. Time,			SUN.		MOON.			
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	
1 Th.	12	10	48	7 Li 27	2 S 50	24 Ge 47	4 S 50	18 N 22	
2 F.		14	44	8 26	3 13	6 C. 40		19 18	50
3 Sa.		18	41	9 25		36 18	32 3	40 18	25
4 Su		22	37	10 24		59 0 Le	26 2	51 17	10
5 M.		26	33	11 23	4 22	12 32	1 51	15 09	
6 Tu		30	30	12 22		45 24	54 0	45 12	25
7 W.		34	26	13 22	5 08	7 Vi 35	0 N 20	9 00	
8 Th.		38	23	14 21		31 20	33 1	30 5	07
9 F.		42	19	15 20		54 3 Li	56 2	33 0	50
10 Sa.		46	15	16 19	6 17	17 40	3 35	3 S 36	
11 Su.		50	12	17 19		40 1 Sc	36 4	21 7	55
12 M.		54	08	18 18	7 03	15 48	4 51	11 50	
13 Tu.		58	05	19 17		26 0 Sa	14 5	05 15	05
14 W.	13	2	02	20 17		49 14	35 5	00 17	29
15 Th.		5	58	21 16	8 12	28 54	4 35	18 40	
16 F.		9	55	22 16		34 13 Ca	15 3	53 18	45

Date,	Mercury,		Venus,		Mars,		Jupiter,	
	Lat,	Decl,	Lat,	Decl,	Lat,	Decl,	Lat,	Decl,
1	3 S	42 13 S	15 1 N	28 3 N	06 0 N	43 2 S	54 0 S	2 21 N
5	3	20 11	57 27	1 11		42 3	58 3	33
9	2	14 9	25 26	0 S	55 40	5 02		3 29
13	1	05 6	45 25	2 52		39 6	04 3	26
16	0	03 4	48 23	4 23		37 6	48 4	23

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus,	
1	25 Li 35	25 Vi 35	9 Li 00	22 C. 28	12 Ge 29	4 Ge 24	21.44
2	25 R 12	26 49		39 35	R 28	R 23	22.35
3	24 42	28 04	10 18	42 27		22	23.26
4	24 06	29 29		58 49	26	20	24.17
5	23 18	0 Li 34	11 37	56 25		19	25.10
6	22 16	1 48	12 16	23 03	24	18	26.40
7	21 17	3 03		56 10	23	17	27.20
8	20 20	4 18	13 35	16 22		15	28.40
9	19 14	5 33	14 14	22 21		14	29.70
10	18 05	6 48		54 28	20	13	0.11
11	16 55	8 03	15 33	34 18		11	1.8
12	15 42	9 18	16 12	40 16		10	2.29
13	14 35	10 33		52 46	14	08	3.40
14	13 34	11 48	17 31	51 11		09	4.52
15	12 40	13 40	18 10	56 09		07	5.64
16	11 56	14 18		50 24	01 12	07 4 06	6.75

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	1 S	54 20 N	25 0 S	10 20 N	52 1 N	17 1 N	13 29 Vi	55 2 Vi
5		55 24	„	51 „		10 0 Li	04	11
9		23 „		50 „		07 13	1 58	
13		22 „		49 18		03 21		45
16		56 21	„	48 „		00 27		36

Date.	Sid. Time.			SUN.		MOON.		
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.
16 F.	13	9	55	22 Li	16 8 S	34 13 Ca	15 3 N	53 18 S
17 Sa.	13	51	23	15		56 27	18 3	00 17
18 Su.	17	48	24	15 9		18 11 Aq	18 1	55 15
19 M.	21	45	25	14		40 25	03 0	45 12
20 Tu	25	41	26	14 10		02 8 Pi	44 0 S	30 8
21 W.	29	38	27	14		24 22	12 1	40 4
22 Th.	33	34	28	13		46 5 Ar	27 2	45 0
23 F.	37	30	29	13 11		08 18	31 3	38 3 N
24 Sa.	41	27	0	Sc 13		29 1 Ta	25 4	20 7
25 Su.	45	23	1	13		50 14	00 4	45 11
26 M.	49	20	2	12 12		11 26	29 5	00 14
27 Tu.	53	17	3	12		32 8 Ge	42 4	49 16
28 W.	57	14	4	12		53 20	48 4	41 18
29 Th.	14	1	10	5	12 13	13 2 C	43 4	19 19
30 F.	5	08	6	12		32 14	31 3	45 18
31 Sa.	14	9	05	7	12 13	51 26	25 2	57 17

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	0 S 03	4 S 48	1 N 23	4 S 23	0 N 37	6 S 48	0 S 04	21 N 23
20	1 N 04	3 09	20 6	19	35 7	49	"	20
24	41	35	16 8	16	33 8	50	05	17
28	2	(7 4	22	11 10	11	31 9	51	"
31	08	5 47	06 11	32	29 10	37	06	13

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	11 Li 56	14 Li 18	18 Li 50	24 C 01	12 Ge 07	4 Ge 06	6.75
17	11 R 20	15 33	19 30	06	R 05	R 04	7.84
18	10 55	16 48	20 10	11	02	02	8.92
19	10 40	18 03	49	16	00	00	9.98
20	10 37	19 18	21 29	21 11	58 3	58	11.04
21	10 D 46	20 33	22 09	25	55	56	12.08
22	11 04	21 48	49	29	52	54	13.10
23	11 33	23 03	23 29	33	49	52	14.11
24	12 11	24 18	24 09	37	46	50	15.08
25	12 57	25 33	49	41	43	47	16.05
26	13 52	26 48	25 30	45	40	45	17.01
27	14 52	28 03	26 10	48	37	43	18.96
28	16 00	29 18	50	51	34	41	18.89
29	17 12	0 Sc 34	27 31	54	31	39	19.80
30	18 28	1 50	28 11	57	28	37	20.70
31	19 Li 48	3 05	28 Li 51		0 11 Ge 24	3 G 35	21.60

Date.	Saturn.		Uranus.		Neptune.		Node.
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	
16	1 S 56	20 N 21	0 S 10	20 N 48	1 N 18	1 N 00	0 Vi 27
20	"	19	"	47	"	0 56	36
24	57	17	"	45	"	53	44
28	"	15	"	44	"	51	52
31	"	20 N 13	"	20 N 43	"	0 N 49	0 Vi 58

Date.	Sid. Time.			SUN.		MOON.				
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.		
1 Su.	14	13	2	8 Sc 12	14 S 10	8 Le 15	2 S 00	16 N 10		
2 M.		16	58	9 12		29 20	20 0	59 13	40	
3 Tu.		20	55	10 12		48 2 Vi	41 0 N	04 10	30	
4 W.		24	51	11 12	15	06 15	25 1	13 6	51	
5 Th.		28	48	12 12		24 28	36 2	16 2	43	
6 F.		32	45	13 13		42 12 Li	0 3	15 1 S	42	
7 Sa.		36	42	14 13	16	00 25	57 4	05 6	11	
8 Su.		40	38	15 13		18 10 Sc	18 4	43 10	22	
9 M.		44	35	16 13		36 24	53 5	00 14	05	
10 Tu.		48	31	17 14		53 9 Sa	45 4	57 17	11	
11 W.		52	28	18 14	17	10 24	32 4	34 18	37	
12 Th.		56	25	19 14		27 9 Ca	15 3	56 19	05	
13 F.	15	0	21	20 15		43 23	50 3	01 18	15	
14 Sa.		4	17	21 15		59 8 Aq	02 1	57 16	20	
15 Su.		8	14	22 16	18	15 22	00 0	48 13	25	
16 M.	15	12	10	23 16		30 5 Pi	40 0 S	25 9	51	

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	2 N 7	6 S 20	1 N 4	12 S 2	0 N 29	10 S 51	0 N 6	21 N 14
5	1 55	8 38	0 56	13 45	27 11	47	7	"
9	3 10	57	49	15 23	25 12	45	"	"
13	10 13	33	41	16 55	23 13	43	8	15
16	0 N 51	15 27	0 33	18 00	0 21	14 25	8	15

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	21 Li 14	4 Sc 20	29 Li 31	25 C 02	11 Ge 21	3 Ge 33	22.51
2	22 41 5	35 0 Sc 11		04 R 18		R 30	23.43
3	24 11 6	50 0 51		06 14		28	24.37
4	25 40 8	05 1 31		08 10		25	25.35
5	27 13 9	20 2 12		09 06		23	26.37
6	28 46 10	35 2 52		10 2		21	27.40
7	0 Sc 20	11 50 3 32		11 10 58		19	28.48
8	1 55 13	05 4 13		12 54		17	29.59
9	3 31 14	20 4 54		12 50		15	0.72
10	5 05 15	35 5 35		13 46		13	1.87
11	6 40 16	50 6 16		13 42		10	3.03
12	8 19 18	05 6 57		14 38		08	4.17
13	10 6 19	21 7 38	R 14	34 06		5.30	
14	11 32 20	36 8 19		14 30		04	6.40
15	13 08 21	51 9 00		14 26		01	7.48
16	14 44 23	06 9 41	25 13 10	22 2 58		8.53	

Date.	Saturn.		Uranus		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	1 S 57	20 N 13	0 S 10	20 N 43	1 N 18	0 N 48	0 Li 59	0 Vi 45
5	"	11	"	41	"	45	1 06	33
9	"	09	"	39	"	42	13	20
13	"	07	"	37	19	39	20	07
16	"	20 N 05	"	20 N 36	1 N 19	0 N 37	1 Li 25	29 Le 57

Date.	Sid. Time.			SUN.		MOON.				
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.		
16 M.	15	12	10	23 Sc	16 18 S	30 5 Pi	40 0 S	25 9 S	51	
17 Tu.		16	07	24	16	45 19	00 1	35 5	49	
18 W.		20	03	25	17	59 2 Ar	10 2	39 1	33	
19 Th.		24	00	26	17 19	13 15	05 3	30 2 N	41	
20 F.		27	56	27	18	27 27	50 4	12 6	44	
21 Sa.		31	53	28	19	41 10 Ta	24 4	39 10	23	
22 Su.		35	49	29	19	55 22	48 4	56 13	39	
23 M.		39	46	0 Sa	20 20	0 5 Ge	02 5	00 16	12	
24 Th.		43	42	1	20	22 17	05 4	43 18	00	
25 W.		47	39	2	21	35 29	06 4	19 19	01	
26 Th.		51	35	3	22	48 11 C	00 3	45 19	18	
27 F.		55	32	4	22 21	01 22	48 2	57 18	35	
28 Sa.		59	28	5	23	13 4 Le	36 2	03 17	07	
29 Su.	15	3	25	6	24	24 16	34 1	05 14	51	
30 M.	16	7	22	7	25 21	34 28	32 0	02 11	55	

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	0 N 51	15 S 27	0 N 33	18 S 00	0 N 21	14 S 25	0 N 08	21 N 15
20		24 17 51		24 19 18		10 15 16		09 16
24	0	4 20 00		16 20 29		17 16 07		09 18
28	0	32 21 S 25	0 N 08	21 S 34	0 N 15	16 55	0 N 10	21 N 20

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	14 Sc 44	23 Sc 06	9 Sc 41	25 C. 13	10 Ge 22	2 Ge 58	3.53
17	16	21 24	21 10	22	R 13	R 17	9.56
18	17	57 25	36 11	03	12	12	10.58
19	19	32 26	51 11	44	11	07	11.57
20	21	09 28	06 12	25	10	02	12.54
21	22	45 29	22 13	06	08 9	57	13.51
22	24	20 0 Sa	37 13	47	06	52	14.46
23	25	56 1	53 14	28	04	47	15.39
24	27	32 3	09 15	09	01	42	16.31
25	29	06 4	25 15	50 24	58	37	17.23
26	0 Sa	41 5	41 16	31	55	32	18.14
27	2	16 6	57 17	12	52	27	19.04
28	3	50 8	13 17	53	49	22 29	19.94
29	5	25 9	29 18	34	46	17	20.85
30	6	59 10	45 19	16 24	43 9	12 2	21.76

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
16	1 S 57	20 N 05	0 S 10	20 N 36	1 N 19	0 N 37	1 Li 25	29 Le 57
20	"	2	09	34	"	35	30	44
24	"	19 59	09	32	"	33	36	32
28	"	56	09	30	"	32	41	19

Date.	Sid. Time.			SUN.		MOON.			
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	
1 Tu	16	11	18	8 Sa 26	21 S	43 10 Vi 48	1 N 05	8 N 48	
2 W.		15	15	9	26	52 22	20 2	07 4	40
3 Th.		19	11	10	27 22	00 6 Li 25	3	06 0	12
4 F.		23	08	11	28	08 19	50 3	58 4 S	07
5 S.		27	04	12	29	16 3 Sc 48	4	33 8	25
6 Su.		31	01	13	30	24 18	14 4	55 12	29
7 M.		34	58	14	31	32 3 Sa 08	5	00 15	48
8 Tu.		38	54	15	32	40 18	10 4	41 18	08
9 W.		42	51	16	33	47 3 Ca 25	4	06 19	10
10 Th.		46	48	17	34	53 18	30 3	10 18	54
11 F.		50	44	18	35	59 3 Aq 23	2	05 17	20
12 Sa.		54	41	19	36 23	05 17	50 0	48 14	35
13 Su.		58	38	20	37	09 2 Pi 00	0 S	27 11	05
14 M.	17	2	35	21	38	13 15	47 1	36 7	03
15 Tu.		6	31	22	39	16 29	06 2	40 2	46
16 W.		10	28	23	40 23	19 12 Ar 08	3 S	35 1 N	30

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	0 S 50	22 S 33	0 S 01	22 S 15	0 N 14	17 S 31	0 N 10	21 N 23
5	1 18	23 48	10	54	11 18	17	11	26
9	1 37	24 45	20 23	27	08 19	00	12	30
13	1 50	25 14	30	55	05	40	12	34
16	2 00	25 27	0 S 39	24 03	0 N 02	20 07	0 N 13	21 N 38

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
1	8 Sa 32	12 Sa 01	19 Sc 57	24 C 39	9 Ge 07	2 Ge 22	22.70
2	10 06	13 17	20 38	R 35	R 02	R 20	23.66
3	11 40	14 32	21 19	31 8	57	17	24.67
4	13 14	15 47	22 00	27	52	15	25.70
5	14 50	17 02	42	22	47	12	26.78
6	16 24	18 18	23	17	42	10	27.90
7	17 57	19 33	24 05	12	37	07	29.05
8	19 32	20 48	47	07	32	04	0.22
9	21 05	22 04	25 29	02	27	01	1.40
10	22 40	23 20	26 11	23 57	22 1	59	2.48
11	24 15	24 35	53	52	17	56	3.73
12	25 48	25 50	27 35	47	12	54	4.85
13	27 22	27 06	28 17	42	07	51	5.95
14	28 57	28 21	59	37	02	49	7.01
15	0 Ca 31	29 37	29 41	32 7	57	46	8.04
16	2 05	0 Ca 53	0 Sa 23	23 27	52 1	44	9.04

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
1	1 S 56	19 N 54	0 S 9	20 N 29	1 N 19	0 N 31	1 Li 45	29 Le 09
5	"	51	"	27	20	30	49 28	57
9	"	49	"	25	20	29	52	44
13	"	46	"	23	" 20	28	55	31
16	"	19 N 44	"	20 N 22	1 N 20	0 N 27	1 Li 58	28 Le 22

Date.	Sid. Time.			SUN.		MOON.		
	H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.
16 W.	17	10	28	23 Sa 40	23 S	19 12 Ar 08	3 S 35	1 N 30
17 Th.	14	24	24	41		21 24 52	4	16 5 38
18 F.	18	21	25	42		23 7 Ta 20	4	46 9 35
19 Sa.	22	18	26	43		25 19 42	5	00 12 47
20 Su.	26	14	27	44		26 1 Ge 50	5	05 15 33
21 M.	30	11	28	45		27 13 54	4	53 17 36
22 Tu	34	08	29	46		27 25 51	4	25 18 53
23 W.	38	04	0 Ca 47			26 7 C 48	3	48 19 20
24 Th.	42	01	1 48			25 19 36	3	03 18 55
25 F.	45	57	2 50			24 1 Le 27	2	10 17 39
26 Sa.	49	53	3 51			22 13 17	1	10 15 43
27 Su.	53	50	4 52			20 25 10	0	07 13 00
28 M.	57	47	5 53			18 7 Li 15	1 N	00 9 45
29 Tu.	18	01	44 6	54		16 19 30	2	03 6 04
30 W.	05	40	7 55			14 2 Li 00	3	01 2 00
31 Th.	09	37	8 56			12 14 53	3	53 2 S 18
32 F.	18	13	23 9	57 23		10 28 15	4	33 6 33

Date.	Mercury.		Venus.		Mars.		Jupiter.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
16	2 S 00	25 S 27	0 S 39	24 S 03	0 N 02	20 S 07	0 N 13	21 N 38
20	08	13	47	01	00	39	14	43
24	13 24	53	55 23	48	0 S 02	21 11	"	48
28	07 23	57 1	02	29	04	42	15	53
31	57	01	07	05	06	12	16	58
32	1 S 54	22 S 37	1 S 08	22 S 56	0 S 6	22 S 20	0 N 16	21 N 59

Date.	LONGITUDES.						TITHI.
	Mercury.	Venus.	Mars.	Jupiter.	Saturn.	Uranus.	
16	2 Ca 05	0 Ca 53	0 Sa 23	23 C 27	7 Ge 52	1 Ge 44	9.04
17	3 40	2 08	1 05	R 22	47	41	10.02
18	5 15	3 24	47	16	43	39	10.97
19	6 50	4 40	2 29	10	39	37	11.88
20	8 25	5 55	3 11	04	35	35	12.84
21	10 00	7 11	53 22	58	31	33	13.76
22	11 35	8 27	4 35	51	27	31	14.66
23	13 09	9 43	5 18	44	23	29	15.58
24	14 44	10 59	6 00	36	19	27	16.48
25	16 18	12 14	7 43	28	15	25	17.38
26	17 52	13 29	8 25	20	11	23	18.29
27	19 26	14 44	07	12	07	21	19.19
28	20 59	16 00	49	04	03	19	20.11
29	22 31	17 16	9 32	21	56 6	59	21.05
30	24 02	18 32	10 14	48	55	15	22.01
31	25 33	19 47	57	40	2 51	13	23.01
32	27 Ca 02	21 Ca 04	12 Sa 40	21 C 31	6 Ge 47	1 Ge 11	24.02

Date.	Saturn.		Uranus.		Neptune.		Node.	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Long.	Long.
16	1 S 56	19 N 44	0 S 09	20 N 22	1 N 20	0 N 27	1 Li 58	28 Le 24
20	55	42	"	20	"	26	2 01	09
24	40	"	18	21	"	"	02 27	57
28	54	38	"	17	"	25	03	42
31	53	36	"	16	"	"	04	34
32	1 S 52	19 N 36	0 S 09	20 N 15	1 N 21	0 N 25	2 Li 04	27 Le 31

APPENDIX.

I Zero meridian of the Indians.

For centuries, Ujjain has been enjoying the astronomical importance of being the Greenwich of India. The Surya-Sidhanta gives the position of the zero meridian by the verse,

राक्षसालयदेवौकः शैल्योर्मध्यसूत्रगाः

रोहीतकमवन्तीच यथा सन्निहितसरः

Bhaskaracharya describes its position by

यल्लंकोज्जयिनीपुरीं परिकुरुक्षेत्रादिदेशानू स्पृशानू

सूत्रं मेरुगतं बुधैर्निगदिता सा मध्यरेखा भुवः

The following places lie on the meridian of Ujjain:—

Kanchi, Calicut, Gadag, Bagalkot, Sholapur, Barsi, Bid,
Bhusaval, Mhow, Kotah, Tonk, Jaipur, Rohtak,
Hissar, Nabha, Ludhiana, Hoshiarpur.

II Helical risings and settings of Jupiter and Venus

	Setting	Rising
JUPITER	9-5-1942	14-7-1942
VENUS	26-1-1942 (West)	4-2-1942 (East)
"	14-10-1942 (East)	25-12-1942 (West)

III Lunar Eclipse.

There will be a Total Eclipse of the Moon on Monday, the 2nd March 1942, after Mid-night.

Commencement of Eclipse 3h. 57min. S. T.

Middle of the Eclipse 5h. 47min. "

End of the Eclipse 7h. 37min. "

IV Full Moons and New Moons in 1942.

Full Moons.		New Moons.	
Date.	Time (S. T.)	Date.	Time (S. T.)
January, 2	21h. 14.36m.	January, 17	3h. 3.0m.
February, 1	14h. 43.0m.	February, 15	15h. 28.8m.
March, 3	5h. 49.5m.	March, 17	5h. 20.1m.
April, 1	18h. 6.6m.	April, 15	20h. 1.4m.
May, 1	3h. 29.1m.	May, 15	11h. 15.1m.
" 30	10h. 27.4m.	June, 14	1h. 29.3m.
June, 28	17h. 31.6m.	July, 13	17h. 0.6m.
July, 28	0h. 39.2m.	August, 12	7h. 58. 0m.
August, 26	9h. 10.9m.	September, 10	21h. 28.6m.
September, 24	20h. 9.4m.	October, 10	10h. 17.8m.
October, 24	9h. 37.7m.	November, 8	20h. 53.2m.
November, 23	1h. 52.0m.	December, 8	7h. 12.7m.
December, 22	20h. 34.3m.		

IMPORTANT PLACES IN INDIA.

Longitudes are calculated with respect to zero meridian of Ujjain whose Lat. is $23^{\circ} 10' N$.

Place.	Lat.	Long.	Place.	Lat.	Long.
Agra ..	$27^{\circ}-18'$	$2^{\circ}-9' E$	Hyderabad Dn.	$17^{\circ}-20'$	$2-40 E$
Ahmedabad ..	23-5	3-15 W	Hyderabad Sind.	25-30	7-30 W
Ajmer ..	26-32	1-13 W	Jaipur ..	26-58	0-0
Allahabad ..	25-30	6-5 E	Jodhpur ..	26-25	2-50 W
Amraoti ..	20-9	1-53 E	Jubbulpur ..	23-12	4-9 E
Amritsar ..	21-42	0-55 W	Karachi ..	24-55	8-50 W
Bangalore ..	12-57	1-40 E	Kolhapur ..	16-35	1-35 W
Baroda ..	22-17	2-40 W	Kumbhakonam.	10-57	3-35 E
Belgaum ..	15-50	1-18 W	Lahore ..	31-35	1-30 W
Benares ..	25-25	7-10 E	Lucknow ..	26-53	5-2 E
Bhopal ..	23-16	1-33 E	Madras ..	13-4	4-22 E
Bikaner ..	28-0	2-38 W	Madura ..	9-52	2-17 E
Bombay ..	18-57	2-55 W	Mysore ..	12-13	0-48 E
Calcutta ..	22-33	12-36 E	Nagpur ..	21-12	0-14 E
Cawnpore ..	26-32	4-31 E	Patna ..	25-38	9-22 E
Dacca ..	23-45	14-35 E	Poona ..	18-25	1-58 W
Delhi ..	28-35	1-20 E	Stara ..	17-33	1-48 W
Dhulia ..	21-0	1-4 W	Sholapur ..	17-37	0-0
Guntur ..	16-13	4-33 E	Shree Nagar ..	34-2	1-0 W
Gwalior ..	26-18	2-16 E	Travancore ..	9-0	1-10 E
Hubli ..	15-13	0-37 W	Wardha ..	20-48	2-45 E