

ASTRONOMICAL EPHEMERIS

of

Geocentric Places of Planets

for

1946

With Tables of Houses for
MADRAS AND BOMBAY.

Indian Standard Time (Old Style) observed throughout.

Published by

Shree Jiwaji Observatory, Ujjain,
with the sanction of Education Department,
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PREFACE.

As a result of a number of suggestions made by the purchasers of our Ephemeris for 1945 the following changes have been made in this book:—

Additions.

1. Times when the moon forms principal aspects with other planets.
2. A permanent Nodal Ephemeris of Mercury and Mars useful for 100 years (1890 to 1990 A. D.).
3. A table of Mid-Heaven (*i. e.*, M. C.) corresponding to a given Sidereal Time.
4. Three more aspects which the planets form mutually are given — (*viz.* $\pm = 144^\circ$; $Q = 72^\circ$; $\perp = 36^\circ$).

Alterations.

1. We have so far been giving the *Tithi* elapsed at noon; henceforth, the ending moments of *Tithis* will be given in I. S. T.
2. The latitude of Bombay being about 19° , we shall be giving times of Sunrise and Sunset for Lat. 19° instead of for 20° from this year.

I must record my grateful thanks to the authorities of the Education Department, Gwalior Government, for the facilities given in preparing this work. It is also a great pleasure to express my thanks to Mr. A. K. Shirke, Manager, A. D. Press, Lashkar, and his Staff for their courtesy and care shown during the printing of this work.

R. V. VAIDYA,

M. A., B. T.,

JYOTIRVIDYARATNA,

Superintendent,

Shree Jiwajee Observatory.

Ujjain, October 1945.

EXPLANATIONS.

I. The Nodal Ephemeris.

This Ephemeris gives the geocentric longitudes of the ascending nodes of Mars and Mercury for the year 1940. The "difference-column" gives the difference to be applied to the longitudes given in the 2nd column. It is to be applied positively for future years and negatively for previous years.

The following question will make the use clear.

Example.—Find the position of the Node of Mercury on 16th October 1935 at 12 o'clock noon G. M. T.

Subtracting 1935 from 1940, we get 5 years as the difference. The Ephemeris for 1935 will show that the Sun's longitude on this day was $22^\circ \pm 11'5''$. The longitude of Ψ 's node (as given in the Nodal Ephemeris) corresponding to this longitude of the Sun is $11^\circ \pm 29'$; and the difference for 50 years is $-7'$. Hence, the difference for 5 years (to be applied negatively) is $+7'$ the longitude of the Node of Mercury then comes to be $11^\circ \pm 29'7''$.

II. Sidereal Time.

To find the Sidereal Time at a place corresponding to a moment given in Standard Time (old style)—

Formula.—The Sid. Time = $S \pm (I + I' + I'') \pm L$, where

S = Sid. Time at Ujjain Mean Noon (as given in this Eph.).

I = Interval between the given moment and Ujjain Mean Noon (*i. e.*, 12h. 26m. 40s. I. S. T.). This is positive or negative according as the given moment is after or before noon.

I' = The motion of Sid. Time corresponding to the interval I .

I'' = The motion of Sid. Time corresponding to the interval L .

L = The Longitude of the place when measured from Ujjain. This is positive or negative according as the place is to the East or West of Ujjain.

Note.— L is to be measured in time and the motion of the Sid. Time for I' and I'' is 9'86 seconds per mean solar hour or '16 sec. per minute.

Example.—Find the Sidereal Time at Bikaner, on August 20, 1946, at 10h. 26m. A. M. (I. S. T.).

The longitude of Bikaner is $2^{\circ}38'$ west of Ujjain. This when converted into time becomes 10 min. 32 sec. and is negative.

$S = 9\text{h. } 52\text{m. } 4\text{s.}$ from the Ephemeris (See Page 16)

$I = (12\text{h. } 26\text{m. } 40\text{s.}) - (10\text{h. } 26\text{m.}) = (2\text{h. } 0\text{m. } 40\text{s.})$ and is negative, since the given moment is before noon.

$I' = (9.86 \times 2 + 16 \times 0 + 16 \times \frac{1}{2}) = 19.82$ seconds and is negative.

$I'' = 8.5 \times 16 = 1.4$ seconds and is negative and $L = 10\text{m. } 36\text{s.}$ and is negative, since Bikaner lies to the west of Ujjain.

Hence, the required Sidereal Time

$= (9\text{h. } 52\text{m. } 4\text{s.}) - (2\text{h. } 0\text{m. } 40\text{s.} + 0\text{h. } 0\text{m. } 20\text{s.} + 0\text{h. } 0\text{m. } 1\text{s.} + 0\text{h. } 10\text{m. } 36\text{s.})$

$= (9\text{h. } 52\text{m. } 4\text{s.}) - (2\text{h. } 10\text{m. } 37\text{s.})$

$= (7\text{h. } 41\text{m. } 27\text{s.})$ Answer.

III. The table of Ascendants and M. C.

This table gives the position of the Ascendant for each degree of latitude in India, corresponding to a given Sidereal time. The table for M. C. is applicable for every place and it gives the point of the zodiac transitting a place at a given sidereal time.

IV. The Sunrise and Sunset.

The moments are given in local time.

V.

A Note on Units of time.

1. There are 3 kinds of Periods in the planetary movement.

(i) *The Sidereal Period* of a planet (its true period of revolution round the Sun) is the time it takes to make a complete circuit round the star sphere, as seen from the Sun and not from the earth.

(ii) *The Anomalistic Period* is the interval between successive returns to the perihelion or aphelion.

(iii) *The Synodic Period* is the interval between successive conjunctions of the planet with the Sun.

A DAY.

2. The 'Day', reckoned with respect to anybody, is the interval between its successive returns to the meridian.

(i) *The Mean Solar Day* is the interval between the successive transits of the Mean Sun across a meridian. It is divided into mean 24 hours. Its variation from true Solar Day, i.e., the interval between two successive transits of TRUE SUN is about 48 seconds.

(ii) *The Mean Sidereal Day* is the interval between successive transits of the Mean Equinox across the meridian. Its value is 23h. 56m. 4.0905s. mean Solar time.

(iii) *The True Sidereal Day* is the exact period of the Earth's axial rotation, as shown by successive transits of a star across the meridian.

Its value is 23h. 56m. 4.0996s.

(iv) *The ordinary Lunar Day* is the interval between successive transits of the Moon across the meridian. It varies from 24h. 38m. to 25h. 6m. and averages 24h. 51m.

A MONTH.

3. (i) *The Synodic Month* or Lunation (29.5306 days) is the period from New Moon to New Moon. New moons recur on the same day of the year every 19 years. This cycle is called the Metonic Cycle. The more accurate "Calippic Cycle" has 76 years or 940 Lunations.

(ii) *The Anomalistic Month* (27.5546 days) is the interval between successive positions of the Moon at its Perigee.

(iii) *The Nodical Month* (27.2122 days) is the interval between moon's position from one of its nodes to the same node again.

(iv) *The Sidereal Month* (27.3217 days) is the period in which the moon makes a complete circuit on the starry sphere.

THE YEAR.

4 (i) *The Solar, Equinoctial or Tropical Year* (365.2422 mean solar days or 366.2422 sidereal days) is the period between the successive returns of the Sun to the same equinox, or to the solstitial point, and is the period in which the seasons recur.

(ii) *The Sidereal Year* (365.2564 days) is the interval between successive conjunctions of the Earth with a star, as seen from the centre of the Sun.

(iii) *The Anomalistic Year* (365.2596 days) is the mean interval between the Earth's return to the Perihelion.

(iv) *The Julian Year* as used in our Calendar consists of exactly 365.25 days.

(v) *The Lunar Year* (354.3670 days) consists of 12 Lunations and is used in the Mohammedan Calendar.

(vi) *The Eclipse Year* (346.6200 days) is the interval between successive returns of the Sun to the same node. It is interesting to note that 19 such years contain 6585.78 days which are equivalent to the ancient "SAROS" cycle of 18 years and 11 days in which the same eclipses occur regularly for over a long period.

(vii) *The Bessel's Fictitious Year* used in N. A. begins at the instant when the Sun's Longitude is exactly 280°.

Elements of the Planetary orbits for 12 O'clock noon (I. S. T.) on 1st January 1946.

Planet.	Mean Longitude.	Mean Daily Motion.	Sidereal Revolution.	Perihelion.	Ascending Node.	Eccentricity.	Mean Distance.
Sun	280° 19' 2"	0° 59'	365.256 Days.	282° 0' 44"	..	.01673181	1.0000001
Moon	257° 14' 57"	13° 10'	27.322 "	..	..	.0549005	238860 miles.
Mercury	177° 21' 36"	4° 5'	87.969 "	76° 36' 38"	47° 41' 27"	.20562362	0.3870984
Venus	262° 2' 22"	1° 36'	224.701 "	130° 46' 19"	76° 11' 38"	.00679873	0.7233301
Mars	99° 3' 47"	0° 31'	686.980 "	335° 3' 54"	49° 8' 29"	.09335525	1.5236781
Jupiter	194° 46' 15"	0° 4'	4332.589 "	13° 27' 10"	99° 54' 10"	.04841027	5.202561
Saturn	109° 23' 17"	0° 2'	10759.23 "	91° 59' 24"	113° 11' 7"	.05573338	9.554747
Uranus	81° 56' 16"	0° 0'	30688.45 "	169° 47' 3"	73° 42' 12"	.0483322	19.21814
Neptune	185° 36' 26"	0° 0'	60181.3 "	45° 48' 35"	131° 11' 4"	.00899995	30.10957
Pluto	159° 42' 58"	0° 0'	90489.3 "	223° 27' 58"	109° 33' 9"	.24852	39.45743
Rahu	89° 27' 49"	0° 3'	6793.458 "	..	..	..	..
J's Perigee	46° 6' 47"	0° 6'	3232.591 "	..	..	..	..

Mean Places of Principal Stars on 1st January 1946.

Names.	Stars.	Mag	R.	A.	Decl.	Long.	Lat.
			H.	M.	°	°	°
♄ Andromeda	U. Bhadra	2.1	0	6	+ 28 47	13 31	+ 25 41
♄ Pegasi	U. Bhadra	2.8	0	10	+ 14 53	8 24	+ 12 36
♄ Piscium	R. vati.	5.6	1	11	+ 7 17	19 7	- 0 13
♄ Eridani	A. hennar.	0.6	1	36	- 57 31	344 33	- 59 23
♄ Polaris	Dhruva.	2.1	1	45	+ 89 0	87 49	+ 66 6
♄ Arietes	Ashvini.	2.7	1	52	+ 20 32	33 13	+ 8 29
♄ Arietes	Ashvini.	2.2	2	4	+ 23 12	36 55	+ 9 58
♄ Arnetes	Bharani.	3.7	2	47	+ 27 2	47 27	+ 10 27
♄ Persei	Algol'	Var	3	5	+ 40 45	45 25	+ 22 25
♄ Tauri	Kritika.	3.0	3	44	+ 23 56	59 14	+ 4 3
♄ Tauri	Rohini.	1.1	4	33	+ 16 24	69 2	- 5 28
♄ Orionis	Rigel'	0.3	5	12	- 8 16	76 5	- 31 8
♄ Aurigee	Capella.	0.2	5	13	+ 45 57	81 6	+ 22 52
♄ Orionis	Belatrix.	1.7	5	22	+ 6 18	80 12	- 16 49
♄ Orionis	Mingalirsh	4.5	5	32	+ 9 27	82 51	- 13 50
♄ Orionis	Ming Bana	1.7	5	33	- 1 14	82 43	- 24 31
♄ Orionis	Aindra.	0.9	5	52	+ 7 24	88 0	- 16 2
♄ Carinae	Agastya.	0.9	6	23	- 52 40	104 13	- 75 50
♄ Canis Majori	Vyadna	1.6	6	43	- 16 38	103 20	- 39 36
♄ Geminorum	Castor'	2.0	7	31	+ 32 1	109 29	+ 10 5
♄ Canis Minor	Prashva.	0.5	7	36	+ 5 22	115 3	- 16 0
♄ Geminorum	Ponnavasu	1.2	7	42	+ 28 10	112 29	+ 6 41
♄ Canceri	Pushya	4.1	8	42	+ 18 21	127 58	+ 0 4
♄ Canceri	Ashadha.	4.3	8	55	+ 12 4	132 53	- 5 5
♄ Leonis	Magha.	1.3	10	5	+ 12 4	149 5	+ 0 27
♄ Leonis	Purva.	2.6	11	11	+ 20 49	160 34	+ 14 20
♄ Leonis	Uttara.	2.2	11	46	+ 14 53	170 52	+ 12 16
♄ Corvi	Hasta.	3.1	12	27	- 16 12	192 42	- 12 11
♄ Virginis	Chitra	1.2	13	22	- 10 52	203 5	- 2 3
♄ Bootes	Wati.	0.2	14	13	+ 19 28	203 29	+ 30 46
♄ Libra	Vishakha	2.9	14	48	- 15 49	224 20	+ 0 20
♄ Scorpis	Anuradha.	2.5	15	57	- 22 28	241 49	+ 1 59
♄ Scorpis	Jyeshtha.	1.2	16	26	- 26 19	249 1	- 4 34
♄ Scorpis	Moon.	1.7	17	30	- 37 4	263 50	- 13 47
♄ Sagittarius	P. Shadha.	2.8	18	17	- 29 51	273 50	- 6 28
♄ Sagittarius	P. Shadha.	1.9	18	21	- 34 25	274 20	- 11 2
♄ Sagittarius	U. Shadha	2.1	18	52	- 26 22	281 38	- 3 26
♄ Lyrae	Aou.	0.1	18	35	+ 38 44	284 34	+ 61 44
♄ Aquillae	Shravana	0.9	19	48	+ 8 43	301 1	+ 29 18
♄ Delphini	Dhanistha	3.7	20	35	+ 14 24	315 35	+ 31 55
♄ Delphini	Dhanistha	3.8	20	37	+ 15 43	316 38	+ 33 2
♄ Cygni	Deneb.	1.3	20	40	+ 45 5	334 35	+ 59 55
♄ Aquarii	Shatabhij.	3.8	22	50	- 7 52	340 49	- 0 23
♄ Piscis Astr.	Pomalhaut	1.3	22	55	- 29 55	333 6	- 21 8
♄ Pegasi	P. Bhadra	2.6	23	1	+ 27 47	358 37	+ 31 8
♄ Pegasi	P. Bhadra	2.6	23	2	+ 14 55	352 44	+ 19 24

EPHEMERIS

OF

Planets' Places for 1946.

INTRODUCTION.

THE places of the Sun, Moon and the Planets given in the following pages are *Sayan* and are true for the mean equinox of 1946. They are given for 12 o'clock noon Indian Standard Time (I.S.T.) which is $5\frac{1}{2}$ hours in advance of Greenwich Mean Time. For war purposes this time is further advanced by one hour but we have throughout made our calculations according to the *old style*. The *Tithis* are likewise given for the noon (I.S.T.) but, for convenience, the *Sidereal Time* is given for the *Mean Noon, Ujjain Local Time*.

Nirayana places are obtained by subtracting the *Ayanamshas* from the *Sayan* places. These *Ayanamshas*, according to different systems prevalent in India, are as follows:—

<i>Grahalaghav</i>	23° 43' 35"	<i>Chitra</i>	23° 5' 7"
<i>Raviat (Zeta Pisc.)</i>	19° 7' 5"	<i>Madras</i>	21° 39'

It should be noted that the *Tithis* are the same both in the *Sayan* and the *Nirayana* systems.

EXPLANATION OF SYMBOLS.

Planets.	Signs.	Aspects.	
☉ Sun.	♈ Aries.	♄ Conjunction	= 0°
☾ Moon.	♉ Taurus.	♌ Semi-Sextile	= 30
♇ Pluto.	♊ Gemini.	♍ Semi-Quintile	= 36°
♆ Neptune.	♋ Cancer.	♎ Semi-Square	= 45°
♅ Herschel (Uranus).	♌ Leo.	* Sextile	= 60°
♄ Saturn.	♍ Virgo.	♏ Quintile	= 72°
♃ Jupiter.	♎ Libra.	♐ Square	= 90°
♂ Mars.	♏ Scorpio.	♌ Trine	= 120°
♀ Venus.	♐ Sagittarius.	♍ Sesqui-quadrant	= 135°
☿ Mercury.	♑ Capricornus.	♎ Bi-quintile	= 144°
♁ Earth.	♒ Aquarius.	♏ Quincunx	= 150°
♃ Rahu.	♐ Pisces.	♄ Opposition	= 180°

JANUARY, 1946.												S. J. O. UJJAIN											
Date	Day	Sidereal Time.			☉		☽			Midnight		ψ											
					Long.	Decl.	Long.	Lat.	Decl.	☽													
1	Tu.	18	41	20	10 15	0 23 S	3 14 7 58	1 N 22	21 S 14	21 7 0	8 36												
2	W.		44	16	11 16	11 22	58 27 6	0 16 23	9 3 15	3 15	36												
3	Th.		48	12	12 17	22	53 9 26	0 S 52	23 59	15 41	36												
4	F.		52	8	13 18	32	47 21 59	2 1 23	38 28 21	36	36												
5	S.		56	4	14 19	42	41 4 46	3 5 22	0 11 14	37	37												
6	Su.	19	0	0	15 20	51	34 17 45	4 0 19	14 24 20	37	37												
7	M.		4	56	16 22	0	26 0 58	4 44 15	27 7 39	37	37												
8	Tu.		8	52	17 23	8	18 14 23	5 11 10	50 21 11	37	37												
9	W.		12	48	18 24	16	10 28 2	5 23 5	36 4 56	37	37												
10	Th.		16	44	19 25	24	2 11 7 53	5 16 0	2 18 53	37	37												
11	F.		20	41	20 26	82 21	53 25 56	4 50 5 N	37 3 8 1	R 37	37												
12	S.		24	38	21 27	40	44 10 8 8	4 11 11	3 17 17	37	37												
13	Su.		28	35	22 28	46	34 24 28	3 1 15	56 1 41	37	37												
14	M.		32	32	23 29	52	24 8 11 54	1 52 19	56 16 8	37	37												
15	Tu.		36	29	24 30	58	13 23 22	0 36 22	41 0 35	37	37												
16	W.		40	26	25 32	4	2 7 46	0 N 43	23 56 14 55	36	36												
17	Th.		44	23	26 38	10 20	51 22 1	1 59 23	36 29 5	36	36												
18	F.		48	20	27 34	16	39 6 13	3 5 21	45 12 59	36	36												
19	S.		52	17	28 35	21	27 19 49	4 0 18	40 26 33	35	35												
20	Su.		56	14	29 36	25	14 3 13	4 39 14	41 9 47	35	35												
21	M.	20	0	11	0 37	28	1 16 15	5 3 10	6 22 38	35	35												
22	Tu.		4	8	1 38	30	47 28 56	5 12 5	11 5 10	35	35												
23	W.		8	5	2 39	31	34 11 19	5 5 0	13 17 24	34	34												
24	Th.		12	2	3 40	3	21 23 26	4 45 4	5 40 29 25	34	34												
25	F.		16	59	4 41	30	7 5 11	4 13 9	20 11 18	33	33												
26	S.		20	56	5 42	29	52 17 13	3 30 13	37 23 8	33	33												
27	Su.		24	52	6 43	28	37 29 3	2 38 17	23 4 59	32	32												
28	M.		28	48	7 44	27	21 10 7 57	1 39 20	27 16 57	32	32												
29	Tu.		32	44	8 45	26	5 23 0	0 35 22	40 29 6	31	31												
30	W.		36	40	9 46	24	48 5 16	0 S 31	23 52 11 29	31	31												
31	Th.	20	39	37	10 47	21	31 17 47	1 38 23	52 24 10	30	30												
Date	ψ		♈		♉		♊		♋		♌												
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.											
1	1 N 28	2 S 4	0 N 2	22 N 34	0 S 6	21 N 29	1 N 16	8 S 29	3 N 55	24 N 22													
3	"	"	"	33	6	30	16	34	59	34													
5	"	"	"	33	6	32	17	37 4	2	46													
7	"	"	"	32	6	34	17	41	5	59													
9	"	"	"	32	6	36	18	44	9 25	11													
11	"	"	"	32	5	38	18	48	11	22													
13	1 29	2 3	"	31	5	40	18	52	12	32													
15	"	"	"	31	5	41	19	55	15	43													
17	"	"	"	31	5	43	19	58	16	52													
19	"	2 2	"	30	4	45	20 9	1	16	59													
21	"	"	"	30	4	47	20	4	16 26	6													
23	"	"	"	30	4	49	21	6	16	13													
25	"	2 1	"	29	4	50	21	8	16	19													
27	1 30	"	"	29	3	52	21	10	14	24													
29	"	2 0	"	29	3	54	22	11	14	28													
31	"	"	"	28	3	55	23	12	12 26	30													

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4		FEBRUARY, 1946.										S. J. O. UJJAIN	
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2	S.		47	30	12 49	9 16	59 13	44	3 36	20 9	20 25	R 29	
3	Su.		51	26	13 50	0	42 27	9	4 21	16 33	3 57	28	
4	M.		55	22	14 50	50	24 10	49	4 52	12 1	17 44	27	
5	Tu.		59	18	15 51	39	6 24	42	5 6	6 48	1 41	26	
6	W.	21	3	15	16 52	27 15	48 8	42	5 2	1 11	15 43	25	
7	Th.		7	12	17 53	14	29 22	46	4 40	4 N 30	19 50	24	
8	F.		11	9	18 54	1	10 6	54	4 1	10 1	13 58	22	
9	S.		15	6	19 54	47 14	51 21	2	3 8	15 0	28 5	21	
10	Su.		19	2	20 55	32	5 11	8	2 3	19 8	12 11	20	
11	M.		23	59	21 56	14	12 19	12	0 51	22 10	26 13	19	
12	Tu.		27	56	22 56	54 13	52 3	13	0 N 24	23 49	10 12	18	
13	W.		30	53	23 57	32	32 17	8	1 37	23 57	24 4	17	
14	Th.		34	50	24 58	9	12 0	57	2 44	22 37	7 47	16	
15	F.		38	47	25 58	44 12	52 14	35	3 39	19 58	21 20	15	
16	S.		42	43	26 59	18	31 28	2	4 22	16 15	4 39	14	
17	Su.		46	39	27 59	50	10 11	13	4 50	11 51	17 42	13	
18	M.		50	35	29 0	21 11	49 24	7	5 2	6 58	0 28	12	
19	Tu.		54	31	0 0	51	28 6	44	4 59	1 55	12 57	11	
20	W.		58	28	1 1	21	6 19	6	4 43	3 S 7	25 10	10	
21	Th.	22	2	25	2 1	49 10	44 1	13	4 13	7 57	7 12	9	
22	F.		6	22	3 2	15	23 13	9	3 33	12 24	19 4	8	
23	S.		10	19	4 2	39	24 59	2	43 16	22 0	7 55	7	
24	Su.		14	16	5 3	0 9	40 6	49	1 47	19 42	12 45	5	
25	M.		18	13	6 3	19	18 18	43	0 46	22 13	24 43	4	
26	Tu.		22	9	7 3	37 8	56 0	46	0 S 18	23 45	6 53	2	
27	W.		26	5	8 3	54	33 13	4	1 22	24 10	19 20	1	
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6	"	58	"	"	"	2 59	24	14	5	35			
8	"	57	"	27	2 22	0	25	14	3	35			
10	"	56	"	"	2	2	25	14	4	0	35		
12	"	55	"	"	2	4	25	14	3	57	34		
14	"	54	"	"	1	5	26	13	53	32			
16	"	53	"	"	1	6	26	12	50	30			
18	"	52	"	"	1	7	27	10	47	27			
20	1 31	51	"	"	1	8	27	8	45	25			
22	"	50	"	"	1	9	28	7	41	22			
24	"	49	"	"	0	9	28	5	38	19			
26	"	48	"	"	0	10	29	2	33	14			
28	"	47	"	"	0	0 22	11	29	0	30	9		

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21	D	25				37			13		7	6	48	10	26	Δ			♈	π		♈	Δ	Δ	Δ	□		
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Date.	♈		♉		Moon's		Date.	Time.	Phenomena.																			
	Lat.	Decl.	Lat.	Decl.	♈	♉																						
2	1 S 13	18 S 5	2 S 0	20 S 35	29 π 32	1 12	52		♈ in Sup. ♈ ☉																			
4	15 17	24	3 19	46	26	2 10	12		New Moon.																			
6	17 16	40	5 18	50	19	6 16	18		♈ on Equator.																			
8	19 15	55	5 17	47	12	8 15	55		♈ at Apogee.																			
10	21	7	3 16	40	4	9 9	58		♈ at First Quarter.																			
12	23 14	19	0 15	24	23	56	11		♈ Sup. ♈ ☉																			
14	24 13	28	1 53	14	7	16	9		Full Moon.																			
16	25 12	36	4 46	12	43	37	19		☉ enters ♈																			
18	26 11	43	3 36	11	44	26	19		♈ on Equator.																			
20	26 10	49	2 9	40	16	22	16		Lat Perigee.																			
22	27 9	54	9 8	0	6	24	8		♈ at Last Quarter.																			
24	27 8	57	0 51	6	18	27	56																					
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MARCH, 1946.												S. J. O. UJJAIN,											
Date	Day	Sidereal Time.			☉		♂			Midnight		ψ											
					Long.	Decl.	Long.	Lat.	Decl.	♂													
1	F.	H. M. S.																					
2	S.	22 34 57	10	4	25	7 S 48	8 = 41	3 S 20	21 S 19	15 = 19	7 = 59												
3	Su.	37 53 11	4	39		25 22	4 4	7 18	3	28 55	R 57												
4	M.	41 49 12	4	50		2 5	51 4	40 13	44	12	51	56											
5	Tu.	45 45 13	4	59	6	39	19 56	4 58	8 34	27 5	54												
6	W.	49 42 14	5	6	16	4	17 5	3 2	52	11	30	53											
7	Th.	53 39 15	5	11	5	53	18 45	4 38	3N 3	26 0	51												
8	F.	57 36 16	5	15	30	3	14 4	0 8	49	10	28	50											
9	S.	23 1 33	17	5	17	7	17 39	3 8	14 6	24 47	48												
10	Su.	5 30 18	5	17	4	44	1	11 57	2 3	18 32	9	2	47										
11	M.	9 27 19	5	15	20	16	4	0	52	21 51	23 3	45											
12	Tu.	13 23 20	5	11	3	56	0	0	N 21	23 48	6	54	44										
13	W.	17 19 21	5	4	32	13	45	1	32	24 15	20 33	42											
14	Th.	21 15 22	4	55	9	27	19	2	37	23 15	4	2	41										
15	F.	25 11 23	4	44	2	45	10	42	3	32	20 57	17 19	39										
16	S.	29 7 24	4	31	21	23	54	4	15	17 33	0	26	38										
17	Su.	33 3 25	4	16	1	57	6	55	4	43	13 20	13 21	36										
18	M.	37 59 26	3	58	33	19	45	4	14	8 34	26 6	34											
19	Tu.	40 56 27	3	38	9	2	24	4	57	4 32	8	39	33										
20	W.	44 53 28	3	17	0	45	14 52	4	42	1 S 34	21 1	31											
21	Th.	48 50 29	2	33	22	27	8	4	13	6 31	3	11	29										
22	F.	52 47 0	2	28	0	N 1	9	19	3	34 11	11 15	11	27										
23	S.	56 44 1	2	1	24	21	9	2	46	15 23	27 3	26											
24	Su.	0 41 2	1	31	48	2	57	1	51	18 56	8	51	24										
25	M.	4 38 3	0	50	1	11	14 43	0	50	21 44	20 40	23											
26	Tu.	8 34 4	0	8	34	26	37	0	S 12	23 36	2	37	21										
27	W.	12 30 4	59	49	58	8	40	1	15	24 25	14 46	20											
28	Th.	16 26 5	59	11	2	21	20 57	2	16	24 4	27 12	18											
29	F.	20 22 6	58	31	45	3	34	3	12	22 29	10	1	16										
30	S.	24 18 7	57	49	3	8	16 35	4	0	19 41	23 15	4	15										
31	Su.	28 14 8	57	6	32	0	3	4	36	15 46	6	58	13										
		0 32 10	9	56	22	3	56 13	59	4	56 10	52 21	7	11										

Date	ψ		♂		♂		♂		♂		
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	
2	1 N 31	1 S 46	0 N 22	22 N 27	0 N 0	22 N 12	1 N 30	8 S 58	3 N 26	26 N 4	
4	"	45	"	27	0	13	30	54	23 25	59	
6	"	44	"	27	0	13	30	51	19	54	
8	"	42	"	28	1	14	31	47	16	49	
10	"	41	"	28	1	14	31	44	13	43	
12	"	40	"	28	1	15	31	40	10	37	
14	"	38	"	29	1	15	32	36	6	30	
16	"	37	"	29	1	16	32	32	2	24	
18	"	36	"	29	2	16	32	27	2	17	
20	"	34	"	30	2	16	33	23	56	9	
22	"	33	"	30	2	17	33	18	53	2	
24	"	32	"	30	2	17	33	13	50	24	54
26	"	30	"	31	3	17	34	8	47	46	
28	"	29	"	31	3	17	34	2	43	37	
30	"	28	"	31	3	17	34	7	57	41	28

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Date	Longitudes								Lunar Aspects.							
	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	♂	
1	13	26	18	26	53	14	28	16	48	24	59	♂	♂	♂	♂	
2	27	R	16	R	50	34	18	4	26	39	♂	♂	♂	♂	♂	
3	27		14		46	40	19	18	28	13	♂	♂	♂	♂	♂	
4	28		12		42	47	20	33	29	43	♂	♂	♂	♂	♂	
5	29		10		38	55	21	48	1	12	♂	♂	♂	♂	♂	
6	29		8		34	15	3	23	3	2	58	♂	♂	♂	♂	
7	30		7		30		12	24	18	3	57	♂	♂	♂	♂	
8	31		5		26		21	25	33	5	11	♂	♂	♂	♂	
9	32		4		21		31	26	48	6	16	♂	♂	♂	♂	
10	33		3		16		41	28	3	7	14	♂	♂	♂	♂	
11	34		2		11		52	28	1	8	5	♂	♂	♂	♂	
12	35		1		6	16	3	0	7	32	8	♂	♂	♂	♂	
13	36		0		1		15	1	46	9	20	♂	♂	♂	♂	
14	37	17	59	25	56		28	3	1	9	46	♂	♂	♂	♂	
15	38		59		50		41	4	16	10	3	♂	♂	♂	♂	
16	39		58		44		55	5	30	10	12	♂	♂	♂	♂	
17	40		58		39	17	9	6	45	10	13	♂	♂	♂	♂	
18	42		57		33		24	7	59	10	5	♂	♂	♂	♂	
19	43		57		27		39	9	14	9	48	♂	♂	♂	♂	
20	45		57		21		55	10	28	9	26	♂	♂	♂	♂	
21	46	D	57		14	18	11	11	43	8	54	♂	♂	♂	♂	
22	48		57		8		27	12	57	8	18	♂	♂	♂	♂	
23	49		57		2		44	14	12	7	37	♂	♂	♂	♂	
24	51		58	24	56	19	1	15	26	6	52	♂	♂	♂	♂	
25	53		58		50		19	16	41	6	3	♂	♂	♂	♂	
26	54		59		43		37	17	55	5	11	♂	♂	♂	♂	
27	56		59		36		55	19	9	4	19	♂	♂	♂	♂	
28	58	18	0		28	20	14	20	24	3	27	♂	♂	♂	♂	
29	59		1		20		33	21	38	2	36	♂	♂	♂	♂	
30	14		2		13		52	22	52	1	47	♂	♂	♂	♂	
31	3		3		6	21	12	24	6	1	1	♂	♂	♂	♂	

Date	♀	♂	Moon's	Date	Time.	Phenomena.				
Lat.	Decl.	Lat.	Decl.	♂	H. M.					
2	1 S 25	6 S 2	0 N 15	1 S 14	27	17	1	6	0	♀ at ♂
4	24	5	2	42	0 N 45	5	2	6	0	♀ at ♂
6	23	4	2	1	10	2	7	26	53	♀ on Equator.
8	21	3	1	36	3	32	40	3	23	New Moon.
10	20	2	0	2	4	46	5	20	23	♀ at Perihelion.
12	18	0	59	29	5	46	5	23	38	♀ on Equator.
14	16	0	N 3	52	6	30	13	6	17	♀ at Apogee.
16	13	1	4	3	10	6	45	9	5	♀ at Gt. Elong. 18° E 9'.
18	10	2	6	24	7	7	10	17	36	♀ at First Quarter.
20	6	3	8	31	6	58	13	13	36	Hel. Rise of ♀ in the E at
22	4	4	8	35	6	35	14	9	40	♀ on Equator.
24	1	5	9	23	5	46	24	19	5	Full Moon.
26	0	57	6	7	4	55	40	21	11	♀ on Equator.
28	54	7	9	2	47	3	56	27	23	♂ enters ♀
30	50	8	8	22	2	18	13	26	4	♀ at Perigee.
							26	14	33	♀ at Last Quarter.
							26	14	33	♀ at Inf. ♂ ⊙

APRIL, 1946. S. J. O. UJJAIN									
Date	Day	Sidereal Time.		☉		☽		Midnight	ψ
		H. M. S.	°	Long.	Decl.	Long.	Lat.		
1	M.	0 36 6	10 55 37	4N 19 28	28 20	5 S 0 5 S 15	5 38	7 10	
2	Tu.	39 3 11	54 50	42 13	0 4 44	0 N 45	20 25	R 8	
3	W.	43 0 12	54 0	5 5 27	51 4 9	6 50	5 19	7	
4	Th.	47 57 13	53 9	28 12	40 3 16	12 33	20 12	5	
5	F.	51 54 14	52 16	51 27	35 2 11	17 30	4 56	3	
6	S.	55 51 15	51 20	6 14 12	12 0 57	21 19	25 1		
7	Su.	59 48 16	50 22	37 26	32 0 N 34	23 43	3 36	0	
8	M.	1 3 45	17 49 23	7 0 10	34 1 32	24 33	17 28	6 58	
9	Tu.	7 42 18	48 20	22 24	17 2 38	23 51	1 2	57	
10	W.	11 39 19	47 15	44 7	14 3 34	21 47	14 20	55	
11	Th.	15 35 20	46 8	8 6 20	53 4 18	18 36	27 23	54	
12	F.	19 32 21	44 58	28 3	12 50 4	47 14 34	10 13	52	
13	S.	23 29 22	43 37	50 16	33 5 2	9 56	22 51	51	
14	Su.	27 25 23	42 23	9 12 29	6 5 2	4 59	5 19	49	
15	M.	31 22 24	41 7	34 11	28 4 47	0 S 7	17 35	48	
16	Tu.	35 19 25	40 49	55 23	40 4 20	5 10	29 43	46	
17	W.	39 15 26	39 29	10 16 5	50 3 41	9 57	11 43	44	
18	Th.	43 12 27	38 7	37 17	40 2 53	14 20	23 36	42	
19	F.	47 9 28	36 43	58 29	31 1 57	18 9	5 25	41	
20	S.	51 5 29	34 17	11 19 19	19 0 55	21 13	17 12	39	
21	Su.	55 1 0	32 50	40 23	6 0 S 6	23 23	29 2	38	
22	M.	58 58 1	31 21	12 1 4	59 1 10	24 31	10 58	37	
23	Tu.	2 55 2	29 50	21 17	1 2 12	24 33	23 6	35	
24	W.	6 51 3	28 18	41 29	16 3 8	23 23	5 31	34	
25	Th.	10 48 4	26 44	13 1 12	1 3 57	21 2	18 17	33	
26	F.	14 45 5	25 8	21 24	50 4 35	17 35	1 28	32	
27	S.	18 41 6	23 31	40 8	14 5 0	13 8	15 7	30	
28	Su.	22 38 7	21 53	59 22	8 5 9	7 51	29 16	29	
29	M.	26 35 8	20 12	14 18 6	30 4 58	2 0	13 50	27	
30	Tu.	2 30 31	9 18 31	14 36 21	15 4 28	4 N 9	28 45	26	

Date	ψ	♈	♉	♊	♋	♌	♍
Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	1N 31	1S 27	0N 22	22N 32	0N 3	22N 17	1N 34
3	" 26	" "	" 33	" 3	" 17	" 34	7S 51
5	" 24	" "	" 33	" 3	" 16	" 34	2N 38
7	" 23	" "	" 33	" 4	" 16	" 34	24N 19
9	" 22	" "	" 34	" 4	" 15	" 34	
11	" 20	" "	" 34	" 4	" 15	" 34	24
13	" 19	" "	" 35	" 4	" 14	" 34	21
15	" 18	" "	" 35	" 4	" 14	" 34	12
17	" 17	" "	" 36	" 4	" 13	" 34	7
19	" 16	" "	" 37	" 5	" 13	" 33	0
21	" 14	" "	" 37	" 5	" 12	" 33	6
23	" 13	" 3	" 38	" 5	" 11	" 33	50
25	" 12	" "	" 39	" 5	" 10	" 33	45
27	" 11	" "	" 39	" 5	" 10	" 33	40
29	" 10	" "	" 40	" 5	" 9	" 33	34

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Date	Longitudes.						Lunar Aspects.									
	♈	♉	♊	♋	♌	♍	☉	☽	♈	♉	♊	♋	♌	♍	♎	♏
1	14	11	5	18	4	23	58	21	32	25	21	0	19	19	19	19
2	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
3	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
5	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
6	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
7	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
11	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
12	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
13	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
14	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
15	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
16	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
17	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
18	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
19	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
20	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
21	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
22	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
23	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
24	15	1	19	2	3	39	23	40	6	18	18	18	18	18	18	18
25	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
26	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
27	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
28	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
29	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"
30	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"

Date	☉	☽	☿	♈	♉	♊	♋	♌	♍	Time.	Phenomena.
1	0S 46	9N 6	1N 52	1N 50	24	11	1	2	9	0	☉ on Equator.
3	41 10	4 1	21 0	53 23	49	2	10	50	50		New Moon.
5	37 11	0 0	48 2		37	3	20	39			☉ at Apogee.
7	32 56	0 16	0S 18		26	5	16	48			☉ on Equator.
9	28 12	50 0	15 1	10	14	8	12	46			☉ at ☿
11	23 43	0 42	1 30		9	1	45				☉ at First Quarter.
13	18 14	35 1	7 1	42 22	53	15	11	27			☉ on Equator.
15	13 15	25 29	1 49		43	16	16	20			Full Moon.
17	8 16	13 50	1 31		33	18	20	12			☉ at Aphelion.
19	3 17	2 2	7 1	14	24	20	13	49			☉ at Perigee.
21	0N 2	17 47	2 21	0 49	15	20	16	0			☉ at ☿
23	8 18	31 2	33 0	N 14	7	22	20	35			☉ enters ♈
25	13 19	12 2	42 0	26 21	59	22	20	0			☉ at Gt. Elong. 27° W 11°
27	18 19	52 2	48 1	13	51	24	4	48			☉ on Equator.
29	23 20	29 52	2 7		44	24	20	33			☉ at Last Quarter.
						29	19	48			☉ on Equator.

10 MAY, 1946. S. J. O. UJJAIN											
Date	Day	Sidereal Time.			☉		☽			Midnight	ψ
		H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	h	
1	W.	2	34	27	10 16 46	14 N 54	6 17 3	S 39	10 N 10	13 15 51	6 24
2	Th.		38	24	11 15 0	15 12	21 26 2	50 15	38 29	1	R 23
3	F.		42	20	12 13 12	30	6 33 1	18 20	6 14	3	21
4	S.		46	17	13 11 23	47	21 25 0	N 123	13 28	51	20
5	Su.		50	14	14 9 32	16 4	6 47 1	20 24	38 13	18	18
6	M.		54	10	15 7 39	21 20	22 2	32 24	24 27	21	17
7	Tu.		58	7	16 5 44	38 4	14 3	33 22	39 11	1	16
8	W.	3	2	4	17 3 47	55 17	43 4	20 19	39 24	19	15
9	Th.		6	0	18 1 48	17 12	1 50 4	52 15	44 7	17	14
10	F.		9	56	18 59 47	28 13	38 5	11 11	19 57	13	13
11	S.		13	52	19 57 45	44 26	11 5	10 6	17 2	23	12
12	Su.		17	48	20 55 43	18 0	8 31	4 57	1 12	14	11
13	M.		21	45	21 53 35	15 20	39 4	31 3	S 52	26	41
14	Tu.		25	41	22 51 25	30 2	40 3	54 8	45 8	38	8
15	W.		29	38	23 49 14	45 14	35 13	5 13	16 20	30	7
16	Th.		33	34	24 47 3	59 26	25 2	10 17	15 2	20	6
17	F.		37	31	25 44 51	19 13	8 14 1	9 20	3 14	8	5
18	S.		41	28	26 42 38	26 20	2 0	4 23	0 25	57	4
19	Su.		45	24	27 40 23	39 1	54 1	S 124	27 7	51	3
20	M.		49	21	28 38 6	52 13	50 2	3 24	46 19	51	2
21	Tu.		53	18	29 35 49	20 5	25 56	3 1	23 57	2	3
22	W.		57	14	0 33 30	17 8	15 3	52 21	58 14	30	1
23	Th.	4	1	11	1 31 11	29 20	49 4	33 18	53 27	14	0
24	F.		5	8	2 28 5	41 3	45 5	2 14	50 10	21	5 59
25	S.		9	4	3 26 29	52 17	5 5	15 9	57 23	54	58
26	Su.		13	1	4 24 7	21 3	0 51	5 11	4 26	7 53	58
27	M.		16	57	5 21 43	13 15	4 4	48 1	N 22	19	57
28	Tu.		20	53	6 19 19	23 29	40 4	6 7	30 7	6	56
29	W.		24	49	7 17 4	33 14	36 3	6 13	14 22	10	56
30	Th.		28	46	8 14 27	42 29	45 1	53 18	15 7	20	55
31	F.	4	32	43	9 11 59	21 51	14 55	0 32	22 3	22 29	55
Date	ψ		♈		♉		♊		♋		
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	
1	1 N 31	1 S 9	0 N 3	22 N 41	0 N 6	22 N 7	1 N 33	6 S 29	1 N 5	21 N 14	
3	"	9	"	42	"	6	32	24	57	20 58	
5	1 30	8	"	43	"	5	32	20	54	41	
7	"	7	"	44	"	4	32	15	52	25	
9	"	6	"	44	"	2	31	11	50	7	
11	"	5	"	45	"	1	31	7	48	19 51	
13	"	4	"	45	0 7	0	31	3	46	33	
15	"	4	"	46	"	21 58	30 5	5	44	15	
17	"	3	"	46	"	56	30	56	42	18 56	
19	"	2	"	47	"	54	29	52	40	36	
21	"	2	"	47	"	53	29	49	38	17	
23	"	1	"	48	"	52	28	46	36	17 57	
25	"	1	"	49	0 8	51	28	44	34	37	
27	"	0	"	49	"	49	27	42	32	16	
29	"	0	"	50	"	47	27	40	30	16 55	
31	0 59			51		45	26	39	28	33	

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Date	Longitudes.						Lunar Aspects.									
	♈	♉	♊	♋	♌	♍	☉	☽	♈	♉	♊	♋	♌	♍	♎	♏
1	15 11 22	19 23 30	20 11 14	3 13 51	2 11 13	14 17 34	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
2	25 35	R 7 4	19 3	26 15 53	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
3	28 39	1	47 4	40 17 15	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
4	31 43	19 55	5 15 5	53 18 39	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
5	34 48	48	44 7	6 20 5	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
6	38 52	42 6	13 8	20 21 34	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
7	41 57	35	42 9	33 23 4	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
8	44 20	1 29	7 11	10 45 24	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
9	47 7	22	40 11	58 26 12	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
10	51 12	16 8	9 13	11 27 47	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
11	54 17	11 38	14 25	29 25	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
12	57 22	6 9	8 15	37 1 7	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
13	0 27	0 38	16 50	2 51	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
14	4 32	18 54	10 8	3 4 35	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
15	7 37	49 38	19 16	6 22	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
16	10 42	44 11	8 20	29 8 11	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
17	13 48	39 38	21 41	10 2	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
18	17 53	34 12	8 22	54 11 54	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
19	20 59	29 39	24 6	13 49	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
20	23 21	5 25	13 10	25 19	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
21	27 11	21 41	26 32	17 45	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
22	30 17	16 14	12 27	44 19 45	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
23	34 23	12 43	28 56	21 48	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
24	37 29	8 15	14 0	9 23 52	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
25	41 25	5 45	1 21	25 57	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
26	44 41	1 16	17 2	34 28 4	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
27	48 47	17 58	49 3	46 0 13	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
28	52 53	54 17	20 4	58 2 23	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
29	56 59	51 52	6 11	4 34	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
30	0 22	6 49	18 24	7 23 6 46	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈
31	3 12	47 56	8 35	8 58	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈	♈

Date	☽		Moon's		Date	Time	Phenomena.
	Lat.	Decl.	Lat.	Decl.			
1	0 N 29	21 N 5	2 S 54	3 N 4	21 11 38	1 18 46	New Moon.
3	34 38	53 4 5	34 2	17 37	2 17 37	1 18 46	at Apogee.
5	39 22	12 50	5 14	30 8	10 45	1 18 46	at First Quarter.
7	44 37	44 6 23	12 17	41 1	12 17 41	1 18 46	on Equator.
9	49 23	3 37	7 41	19 16	8 26	1 18 46	Full Moon.
11	54 26	26 9 1	15 17	4 0	17 4	1 18 46	at Perigee.
13	59 47	15 10 21	12 21	56	21 56	1 18 46	centers n.
15	1 4 24	5 1 11 45	9 24	0 43	24 0	1 18 46	at Aphelion.
17	8 20	1 46 13 9	6 24	9 25	24 9	1 18 46	at Last Quarter.
19	13 32	28 14 36	4 27	5 59	27 5	1 18 46	on Equator.
21	17 39	9 16 2	2 28	4 0	28 4	1 18 46	at ♈
23	21 45	0 50 17 30	0 30	17 45	30 17	1 18 46	at Apo. ee.
25	25 51	29 18 47	20 59	31 2	20 31	1 18 46	New Moon.
27	29 53	7 20 5	31 16	36	36	1 18 46	at Sup. ♈ ☉
29	32 50	0 N 14 21 18	57				
31	36 46	34 22 22	56				

JUNE, 1946. S. J. O. UJJAIN											
Date	Day	Sidereal Time.		☉		☽		Midnight		ψ	
		H. M. S.		Long.	Decl.	Long.	Lat.	Decl.	D		
1	S.	4 36 40	10 11 9 30	21 N 59	0 0 0	0 N 51	24 N 18	7 28	5 59		
2	Su.	40 37 11	7 0 22	6 14 51	2 9 24	46	22 10	R 54			
3	M.	44 34 12	4 29	13 29 18	3 17 24	31	6 23	53			
4	Tu.	48 31 13	1 57	20 13 21	4 15 20	51	20 12	53			
5	W.	52 27 13	59 24	27 26 58	4 57 17	4	3 36	52			
6	Th.	56 23 14	56 50	33 10 9	5 11 12	33	16 36	52			
7	F.	0 19 15	54 15	39 22 57	5 16 7	38	29 14	52			
8	S.	4 15 16	51 39	45 5 27	4 50 2	32	11 35	51			
9	Su.	8 12 17	49 1	51 17 40	4 43 2	S 34	23 43	51			
10	M.	12 9 18	46 23	57 29 42	4 6 7	31	5 40	51			
11	Tu.	16 6 19	43 43	2 11 37	3 20 12	8	17 32	51			
12	W.	20 3 20	41 2	7 23 26	2 36 16	17	29 20	51			
13	Th.	24 0 21	38 20	11 5 15	1 25 19	47	11 9	51			
14	F.	27 57 22	35 37	15 17 4	0 20 22	28	22 59	51			
15	S.	31 54 23	32 54	18 28 57	0 S 54	24	11 55	51			
16	Su.	35 51 24	30 10	20 10 55	1 49 24	49	16 56	50			
17	M.	39 47 25	27 26	22 23 0	2 49 24	16	29 7	D 50			
18	Tu.	43 43 26	24 42	24 5 16	3 42 22	33	11 28	50			
19	W.	47 39 27	21 57	25 17 44	4 25 19	45	24 3	50			
20	Th.	51 35 28	19 11	26 0 26	4 56 15	57	6 54	51			
21	F.	55 32 29	16 26	27 13 27	5 13 11	21	20 3	51			
22	S.	59 29 0	13 41	27 26 44	5 15 6	8	3 31	51			
23	Su.	6 3 26	1 10 56	27 10 23	4 58 0	28	17 24	51			
24	M.	7 23 2	8 10	26 24 25	4 23 5	N 22	1 33	51			
25	Tu.	11 20 3	5 25	25 8 48	3 31 11	4	16 4	51			
26	W.	15 16 4	2 40	23 23 27	2 25 16	17	0 52	51			
27	Th.	19 12 4	59 55	21 8 19	1 8 20	33	15 50	52			
28	F.	23 8 5	57 9	19 23 20	0 N 14	23	0 50	52			
29	S.	27 4 6	54 24	16 8 18	1 35 24	47	15 44	52			
30	Su.	6 31 0	7 51 39	23 13 26	2 49 23	15	0 25	53			
Date	ψ		♈		♉		♊		♋		
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	
2	1 N 30	0 S 59	0 N 3	22 N 52	0 N 8	21 N 43	1 N 26	5 S 37	1 N 27	16 N 10	
4	"	58	"	53	8	41	25	36	25	15 49	
6	"	58	"	53	9	39	25	35	23	26	
8	"	58	"	54	9	37	24	35	21	3	
10	"	57	"	55	9	35	24	35	19	14 39	
12	"	57	"	55	9	33	23	35	18	15	
14	"	57	"	56	9	31	23	35	16	13 51	
16	1 29	57	"	57	9	28	22	35	14	26	
18	"	57	"	57	9	25	22	36	13	1	
20	"	57	"	58	10	23	21	37	11	12 35	
22	"	57	"	59	10	21	20	38	9	10	
24	"	57	"	59	10	18	20	40	8	11 44	
26	"	57	"	23 0	10	15	19	42	6	18	
28	"	58	"	1	10	13	19	5 44	4	10 52	
30	"	58	"	1	10	11	18	4 47	3	25	

EPHEMERIS.												JUNE, 1946.												13		
Date	Longitudes.												Lunar Aspects.													
	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	☉	☽	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓
1	17	11	6	22	18	17	44	19	28	9	19	11	9		☐											
2		10		25		R 41	20		0	10	59	13	20		☐											
3		14		32			38		32	12	11	15	32		☐											
4		17		38			36	21	5	13	32	17	43	*	☐											
5		20		44			34		38	14	35	19	53		☐											
6		24		51			32	22	11	15	47	22	2	☐	☐											
7		27		58			31		43	16	59	24	10		☐											
8		30	23		5		31	23	16	18	10	26	16		☐											
9		34		12			30		49	19	22	28	21	Δ	☐											
10		38		18			29	24	22	20	33	0	24		☐											
11		41		26			28		55	21	45	2	24		☐											
12		45		33			28	25	28	22	57	4	22	☐	☐											
13		48		40			27	26	1	24	8	6	18		☐											
14		52		46			27		34	25	19	8	12		☐											
15		55		54		D	27	27	8	26	31	10	4	☐	☐											
16		58	24		1		27		42	27	42	11	53		☐											
17	18		2		8		28	28	16	28	39	13	39	☐	☐											
18		6		15			28		50	0	4	15	24		☐											
19		9		22			29	29	24	1	15	17	5		☐											
20		13		29			30		58	2	27	18	47	Δ	☐											
21		16		36			31	0	32	3	38	20	25		☐											
22		20		43			32	1	6	4	49	21	58		☐											
23		23		50			34		40	6	0	23	30		☐											
24		27		58			35	2	14	7	11	25	1		☐											
25		30	25		5		37		48	8	22	26	30	*	☐											
26		34		12	20		39	3	22	9	32	27	55		☐											
27		37		20			40		57	10	43	29	18		☐											
28		41		28			42	4	32	11	53	0	38		☐											
29		44		35			45	5	7	13	4	1	48	☐	☐											
30		48		43			48		42	14	14	3	0		☐											
Date	☽		☽		Moon's		Date	Time.		Phenomena.																
	Lat.	Decl.	Lat.	Decl.	☉	☽																				
2	1 N 38	24 N 38	0 N 54	23 N 18	20 11	56	1	19	34	☽ at Perihelion.																
4	41	27	1 11	24 4	56	6	21	39		☽ at First Quarter.																
6	44	13	1 26	24 38	55	8	23	55		☽ on Equator.																
8	46 23	58	1 39	25 3	55	12	23	51		☽ at Perigee.																
10	48	39	1 52	25 19	55	15	0	11		Full Moon.																
12	50	18	1 56	25 19	55					Lunar Eclipse.																
14	51 22	55	2 0	25 12	55	22	6	31		☉ enters ☽																
16	52	27	2 1	24 56	55	22	18	38		☽ at Last Quarter.																
18	53 21	59	1 59	24 32	55	23	13	55		☽ on Equator.																
20	53	28	1 54	23 52	56	27	22	11		☽ at Apogee.																
22	53 20	54	1 47	23 25	55	29	9	37		New Moon.																
24	53	18	1 37	22 43	55																					
26	52 19	40	1 24	21 58	54																					
28	51	1	1 14	21 14	53																					
30	50 18	19	0 52	20 20	54																					

Date	Day	Sidereal Time.		O		L			Midnight	Ψ	
				Long.	Decl.	Long.	Lat.	Decl.	L		
1	M.	6	34 57	8 24 48	53	23 N 9	7 21 38	3 N 50	22 N 5	14 44 46	5 24 53
2	Tu.		38 54	9 46	6		5 21 4	4 36 18	36	28 42	54
3	W.		42 51	10 43	19		1 5 30	5 4 14	12	12 12	54
4	Th.		46 47	11 40	31	22 56	18 47	5 14 9	15	25 17	55
5	F.		50 44	12 37	44		1 2 39	5 9 4	4	7 25 57	55
6	S.		54 41	13 34	56		46 14 10	4 48	1 S 8	20 18	56
7	Su.		58 37	14 32	8		40 26 22	4 15 6	12	2 22	56
8	M.	7	2 33	15 29	20		33 8 20	3 32	10 57	14 18	57
9	Tu.		6 29	16 26	33		26 20 15	2 39	15 15	26 11	58
10	W.		10 25	17 23	45		19 2 6	1 40	18 56	8 7 0	59
11	Th.		14 22	18 20	57		11 13 54	0 37	21 51	19 48	6 0
12	F.		18 19	19 18	9		4 25 44	0 S 28	23 50	1 42	0
13	S.		22 15	20 15	21	21 55	7 13 43	1 32	24 45	13 46	1
14	Su.		26 12	21 12	33		47 19 52	2 33	24 30	26 1	2
15	M.		30 9	22 9	45		38 2 12	3 28	23 3	8 26	3
16	Tu.		34 6	23 6	58		29 14 44	4 13	20 27	21 4	4
17	W.		38 2	24 4	12		19 27 28	4 46	16 51	3 55	5
18	Th.		41 58	25 1	26		9 10 25	5 6	12 23	16 59	6
19	F.		45 54	25 58	40	20 58	23 36	5 10	7 17	0 16	7
20	S.		49 51	26 55	55		47 7 2	4 57	1 46	13 48	8
21	Su.		53 48	27 53	10		36 20 42	4 27	3 N 56	27 37	9
22	M.		57 45	28 50	26		24 4 37	3 41	9 34	11 40	10
23	Tu.	8	1 42	29 47	43		12 18 46	3 18	14 49	25 54	11
24	W.		5 39	0 45	1		0 3 11	6 1	30 19	17 10	12
25	Th.		9 36	1 42	19		48 17 38	0 13	22 38	24 58	13
26	F.		13 33	2 39	37		35 2 18	1 N 5	24 31	9 38	14
27	S.		17 29	3 36	57		21 16 58	2 20	24 41	24 16	15
28	Su.		21 25	4 34	18		7 1 32	3 25	23 8	8 45	16
29	M.		25 21	5 31	40	18 53	15 54	4 15	20 8	22 58	18
30	Tu.		29 17	6 28	14		39 29 57	4 49	16 0	6 51	19
31	W.	8	33 13	7 26	38	18 25	13 39	5 6	11 8	20 22	20
Date.		Ψ		θ		ζ		η		δ	
		Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
2		1 N 29	0 S 59	0 N 3	23 N 2	0 N 11	21 N 9	1 N 18	5 S 50	1 N 1	9 N 56
4		"	1 0	"	3	"	6	17	53	59	29
6		"	0	"	3	"	3	1	57	58	1
8		"	1	"	4	"	0	16	6 0	56	8 33
10		"	1	"	4	"	20 57	16	3	55	5
12		"	2	"	5	0 12	54	15	7	54	7 36
14		1 28	2	"	5	"	51	15	11	52	7
16		"	3	"	6	"	49	14	15	50	6 38
18		"	4	"	6	"	46	14	20	49	9
0		"	5	"	7	"	43	13	25	47	5 39
22		"	6	"	7	"	40	13	30	46	9
24		"	7	"	8	0 13	37	12	35	44	4 39
26		"	8	"	8	"	34	12	41	43	9
28		"	9	"	9	"	31	11	46	41	3 38
30		"	10	"	9	"	27	11	51	40	8

Date.	Longitudes.												Lunar Aspects.														
	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	☉	☽	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
1	18	11	51	25	50	17	11	51	6	17	15	11	25	4	11	16	11	*									
2			55		58			55			52	16	35	5	32			*									
3			58	26	5			58	7		27	17	45	6	43	*											
4	19		2		13	18		1	8		2	18	56	7	49												
5			5		21			4			37	20	6	8	45			☽		☐	*						
6			8		28			8	9		12	21	16	9	38	☐			Δ								
7			11		36			11			47	22	26	10	31				☐								
8			15		44			15	10		22	23	36	11	22							*			☐	☐	
9			18		51			19			57	24	45	12	11	Δ			π						☐		
10			21		59			24	11		33	25	55	12	55			*			Δ						
11			24	27	7			28	12		0	27	4	13	34	π			☽			*		☐		Δ	Δ
12			28		14			33			46	28	14	14	9						π		*		Δ		Δ
13			31		22			38	13		22	29	23	14	41				☐						Δ		π
14			34		30			43			57	0	32	15	10	☽				π				☐		π	
15			37		38			48	14		32	1	41	15	32			Δ			☽				π		
16			40		45			53	15		7	2	50	15	51				Δ				Δ	π		☽	☽
17			43		52			58			42	3	59	16	10	π				π					☽	π	π
18			46	28	0	19		3	16		18	5	8	16	23										☽	π	π
19			49		8			9			55	6	17	16	26	Δ			☐		Δ	π					
20			53		16			15	17		32	7	26	16	R23			☽							π		Δ
21			56		23			21	18		9	8	34	16	14					*			☽	π		Δ	
22			59		31			27			45	9	42	16	2	☐		π			☐						☐
23	20		2		39			33	19		21	10	51	15	49							π		Δ		☐	
24			5		47			40			58	11	59	15	34	*		Δ			*						
25			8		54			47	20		34	13	8	15	13					☽			Δ	☐	☐	*	*
26			11	29	2			54	21		11	14	16	14	46				☐								
27			14		10	20		1			48	15	24	14	10												
28			16		18			7	22		25	16	31	13	30					*			☽	*			
29			19		25			13	23		1	17	39	12	50					*		*					
30			22		33			20			38	18	46	12	9												
31			25		41			28	24		15	19	54	11	27											☽	
Date.	☽		☽		Moon's		Date.	Time.		Phenomena.																	
	Lat.	Decl.	Lat.	Decl.		Ω																					
2	1	N47	17	N34	0	N32	19	N25	20	11	50	H. M.	4	20	0	☽ at Gt. Elong. 26° E S											
4		45	16	50	0	12	18	31			47	4	20	13	3	☽ at Aphelion.											
6		43		3	0	S	9	17	42		46	6	6	46	1	☽ on Equator.											
8		40	15	14	0	36	16	48			46	6	10	40	1	☽ at First Quarter.											
10		38	14	26	1	2	15	57			44	7	4	0	1	☽ at ☽											
12		33	13	34		29	15	10			41	10	17	13	1	☽ at Perigee.											
14		29	12	41		57	14	27			38	14	14	51	1	Full Moon.											
16		25	11	47	2	27	13	45			35	15	20	30	1	☽ at Aphelion.											
18		20	10	52		56	13	8			32	16				☽ at Max. Brilliancy.											
20		15	9	56	3	22	12	43			27	20	19	26	1	☽ on Equator.											
22		9		0		47	12	25			22	22	1	22	1	☽ at Last Quarter.											
24		3	8	3	4	11	12	11			17	23	17	31	1	☉ enters ♈											
26	0	57	7	5		33	12	3			11	25	17	36	1	☽ at Apogee.											
28		50	6	6		45	12	16			5	28	17	24		New Moon.											
30		44	5	6		43	12	28	19	58																	

16 AUGUST, 1946. S. J. O. UJJAIN															
Date	Day	Sidereal Time.			☉		☽			Midnight		☽			ψ
		H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	☽		Long.	Lat.	Decl.	
1	Th.	8	37	10	8 ^h 24	3	18N 9	26 ^m 59	5 N 4	5N 52	3 ^h 28	6 ^h 21			
2	F.	41	6	9	21	29	17 55	9 ^h 52	4 48	0 31	16 10	23			
3	S.	45	3	10	18	55	40 22	24 4	18 4	S 43	28 32	24			
4	Su.	49	0	11	16	22	25 4 ^m	37 3	37 9	39 10 ^m	38 25				
5	M.	52	56	12	13	50	9 16	37 2	47 14	10 22	33 27				
6	Tu.	56	52	13	11	19	16 53	28 28	1 50	18 2	4 ^h 23	28			
7	W.	9	0	48	14	8	49 36	10 ^h 17	0 49	21 11	16 11	30			
8	Th.	4	45	15	6	19	19 22	7 0	S 15	23 27	28 4	31			
9	F.	8	42	16	3	49	2 4 ^h	4 1	18 24	40 10 ^h	6 33				
10	S.	12	38	17	1	21	15 45	16 11	2 18	45 22	19 34				
11	Su.	16	35	17	58	54	28 28	31 3	13 23	37 4 ^h	46 36				
12	M.	20	32	18	56	28	10 11	6 3	59 21	17 17	29 37				
13	Tu.	24	29	19	54	4	14 52	23 56	4 35	17 52	0 ^h 28	39			
14	W.	28	25	20	51	40	33 7 ^h	2 4	56 13	32 13	41 41				
15	Th.	32	22	21	49	17	14 20	23 5	3 8	28 27	7 43				
16	F.	36	18	22	46	55	13 55	3 ^h 55	4 52	2 56	10 ^h 45	45			
17	S.	40	15	23	44	33	36 17	37 4	24 2N	50 24	32 47				
18	Su.	44	12	24	42	15	17 1 ^h	28 3	41 8	30 8 ^h	26 49				
19	M.	48	8	25	40	0	12 58	15 26	2 45	13 50	22 27	50			
20	Tu.	52	4	26	37	45	39 29	30 1	39 18	28 6 ^h	34 52				
21	W.	56	0	27	35	22	19 14	39 0	24 22	2 20	45 53				
22	Th.	59	57	28	33	11	11 59	27 52	0N 51	24 16	4 ^h 59	55			
23	F.	10	3	54	29	31	2 39	12 ^h 7	2 32	24 56	19 15	57			
24	S.	7	50	0 ^h	28	55	19 26	22 3	7 23	57 3 ^h	28 59				
25	Su.	11	47	1	26	51	10 58	10 ^h 32	3 59	21 26	17 34	7 1			
26	M.	15	43	2	24	49	37 24	33 4	37 17	41 1 ^h	29 3				
27	Tu.	19	40	3	22	48	16 8 ^h	21 4	57 13	2 15	10 5				
28	W.	23	36	4	20	49	9 55	21 51	4 59	8 5	28 32	7			
29	Th.	27	32	5	18	50	34 5 ^h	1 4	46 2	39 11 ^h	33 9				
30	F.	31	29	6	16	50	13 17	51 4	19 3S	1 24	8 11				
31	S.	10	35	25	7	14	8 52	0 ^h 21	3 40	8 10	6 ^h 29	13			
Date		ψ		♈		♉		♊		♋		♌		♍	
		Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	1N 28	1 S 11	0N 3	23N 9	0N 14	20N 25	1N 10	6 S 57	0N 38	2N 38					
3	"	13	"	10	"	22	10	7 3	37	7					
5	"	14	"	10	"	19	10	10	35	1 36					
7	"	15	"	10	"	16	9	16	34	5					
9	1 ^h 27	16	"	11	"	12	9	23	32	0 34					
11	"	18	0	4	11	"	9	8	30	31	3				
13	"	19	"	"	11	0 ^h 15	6	8	37	30	0 S 28				
15	"	20	"	"	12	"	3	8	44	28	59				
17	"	22	"	"	12	"	0	7	51	27	1 32				
19	"	23	"	"	12	"	19	57	7	58	25 2 3				
21	"	24	"	"	12	"	54	6 8	5	24	35				
23	"	26	"	"	13	0 ^h 16	51	6	13	22	3 6				
25	"	27	"	"	13	"	48	5	21	21	38				
27	"	28	"	"	13	"	45	5	29	20	4 10				
29	"	30	"	"	13	"	42	5	37	18	41				
31	"	32	"	"	14	"	39	5	45	17	5 12				

EPHEMERIS.																AUGUST, 1946.																17
Date	Longitudes.															Lunar Aspects.																
	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓								
1	20	27	29	29	49	20	24	36	24	52	21	2	10	42																		
2	29	57	44	25	29	22	9	9	R 57	*	☉	☽	*	☉	☽	*	☉	☽	*	☉	☽	*	☉	☽								
3	31	0	5	51	26	6	23	16	9	12					☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
4	34	12	59	43	24	22	8	29							☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
5	36	20	21	7	27	20	25	29	7	47	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
6	37	27	15	57	26	35	7	7							☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
7	41	34	23	28	34	27	41	6	31		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
8	44	42	32	29	12	28	47	5	58						☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
9	46	50	40	50	29	53	5	30			☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
10	49	58	48	0	27	1	5	7			☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
11	51	1	6	57	1	4	2	6	4	52					☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
12	53	13	22	6	42	3	12	4	52		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
13	55	21	15	2	20	4	17	4	D 53		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
14	57	28	24	58	5	22	5	6			☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
15	59	36	33	3	36	6	27	5	24		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
16	21	1	43	43	4	15	7	32	5	40	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
17	3	51	52	53	8	36	6	2	4		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
18	5	58	23	1	5	31	9	41	6	34	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
19	7	2	5	10	6	9	10	45	7	16					☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
20	9	12	19	19	47	11	49	8	7		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
21	11	19	29	7	25	12	53	9	7		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
22	13	26	39	8	4	13	56	10	10		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
23	15	34	49	9	42	14	59	11	19		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
24	17	41	59	9	21	16	2	12	35		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
25	19	48	24	9	59	17	5	13	56		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
26	20	56	19	10	38	18	8	15	23		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
27	22	3	30	11	17	19	10	16	55		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
28	24	10	40	11	55	20	12	18	30		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
29	26	17	50	12	34	21	14	20	10		☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
30	27	24	25	1	13	13	22	15	21	54					☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
31	28	31	11	52	23	17	23	40							☉	☽	☉	☽	☉	☽	☉	☽	☉	☽								
Date	☽		☽		Moon's		☽		☽		Date	Time	Phenomena.																			
	Lat.	Decl.	Lat.	Decl.	☽		Lat.	Decl.	☽																							
1	0N 36	4N 6	5 S 3	12N 42	19	11	52	2	14	22	H. M.		☽ on Equator.																			
3	28 3	6 4	52 13	16			44	2	20	51			☽ at Inf. ☉ ☽																			
5	20 2	6 40	13 42				36	5	2	22			☽ at First Quarter.																			
7	12 1	6 21	14 26				28	7	2	36			☽ at Perigee.																			
9	3 0	5 3	56 15	5			19	9	15	55			☽ on Equator.																			
11	S 6	0 S 56	30 15	40			12	10	4	0			☽ at ☉																			
13	15 1	56 2	55 16	13			4	11	16	0			☽ on Equator.																			
15	25 2	57 21	16 39	18			52	13	3	56			Full Moon.																			
17	35 3	58 1	47 17	3			40	17	0	12			☽ on Equator.																			
19	45 4	57 15	17 15				26	20	6	48			☽ at Last Quarter.																			
21	56 5	57 0	41 17	19			13	23	8	49			☽ at Apogee.																			
23	1	6 6	56 10	17	14		3	24	0	1			☽ enters ☽																			
25	17 7	54 0N	18 16	48			54	27	2	36			☽ at ☽																			
27	28 8	52 42	16 26				42	28	18	53			New Moon.																			
29	40 9	47 1	3 15	46			29	28	18	53			☽ at Perihelion.																			
31	51 10	46 19	14 53				16	29	23	13			☽ on Equator.																			

SEPTEMBER, 1946.										S. J. O. UJJAIN									
Date	Day	Sidereal Time.			☉		☽			Midnight			ψ						
					Long.	Decl.	Long.	Lat.	Decl.	D									
1	Su.	10	39	22	8 ^m 12 53	8° N 30	12 ^m 33	2° N 51	12° S 48	18 ^m 35	7 ^h 15								
2	M.		43	19	9 10 58		9 24 33	1 55 16	50	0 30									
3	Tu.		47	15	10 9 5	7 47	6 24	0 55 20	29	12 18									
4	W.		51	12	11 7 14	25 18	12 0	S 7 23	2	24 7									
5	Th.		55	9	12 5 25	3	0 4	1 9 24	36	6 2									
6	F.		59	5	13 3 37	6 41	12 3	2 8 25	2	18 7									
7	S.	11	3	2	14 1 50	18 24	15 3	4 24 18	0 26										
8	Su.		6	59	15 0 4	5 56	6 43	3 51 22	20	13 4									
9	M.		10	55	15 58 19	33 19	30 4	28 19 15	26 2										
10	Tu.		14	51	16 56 36	10 2	38 4	51 15 5	9 20										
11	W.		18	48	17 54 55	4 47	16 5	5 2 10	6	22 55									
12	Th.		22	45	18 53 16	24 29	50 4	51 4 32	6 47										
13	F.		26	41	19 51 39	1 13 48	4 24	1 N 22	20 55										
14	S.		30	38	20 50 4	3 38 27	54 3	42 7 16	4 58										
15	Su.		34	35	21 48 31	15 12 8	6 2	46 12 50	19 12										
16	M.		38	32	22 47 0	2 52 26	18 1	39 17 43	3 23										
17	Tu.		42	28	23 45 31	29 10 28	0 26 21	36 17 32											
18	W.		46	24	24 44 4	6 24 35	0 N 48	24 9 1 38											
19	Th.		50	20	25 42 40	1 43 8 39	1 59 25	9 15 39											
20	F.		54	16	26 41 19	19 22 38	3 3 24	36 29 35											
21	S.		58	13	27 40 0	0 56 6 31	3 55 22	32 13 25											
22	Su.	12	2	10	28 38 43	33 20 16	4 33 19	10 27 6											
23	M.		6	7	29 37 28	9 3 52	4 54 14	57 10 36											
24	Tu.		10	4	0 36 16	0 S 14 17	16 5 0	9 37 23 53											
25	W.		14	0	1 35 6	37 0 27	4 50 4	15 6 56											
26	Th.		17	57	2 34 5	1 13 22	4 24 1	S 13	19 43										
27	F.		21	53	3 32 48	24 26 0	3 45 6	32 2 13											
28	S.		25	50	4 31 40	48 8 22	2 57 11	30 14 28											
29	Su.		29	46	5 30 35	2 11 20	30 2 1	15 56 26 30											
30	M.	12	33	43	6 29 36	34 2 27	1 1 19	40 8 23											

Date.	ψ		♈		♉		♊		♋	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
2	1° N 27	1° S 33	0° N 4	23° N 14	0° N 16	19° N 36	1° N 4	8° S 53	0° N 16	5° S 44
4	"	34	"	14	17	33	4	9	1	15
6	"	36	"	14	17	30	4	10	13	46
8	"	38	"	15	17	27	3	28	12	7
10	"	40	"	15	17	24	3	26	11	59
12	"	41	"	15	17	21	3	34	9	8
14	"	43	"	15	17	18	3	43	8	51
16	"	45	"	15	18	15	2	52	7	9
18	"	47	"	15	18	13	2	10	1	5
20	"	49	"	15	18	10	2	9	4	10
22	"	51	"	15	18	7	2	18	3	52
24	"	52	"	15	18	5	1	27	2	11
26	"	54	"	16	19	3	1	36	0	0
28	"	5	"	16	19	0	1	44	0 S	1
30	"	58	"	16	19	18 58	1	53	3	12

EPHEMERIS.										SEPTEMBER, 1946.										19							
Date	Longitudes.										Lunar Aspects.																
	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	☉	☽	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	
1	21	29	3	38	25	22	14	31	24	17	25	29	*	♈												☐	
2		30		45		33	15		10	25		18	27	20	☐	♈											
3		32		51		44			49	26		19	29	13	☐	*	♈	Δ			*						Δ
4		33		57		55	16		28	27		19	1 ^m	7			♈			*							
5		34	4		4	26		6	17		7	28		19	3	2		♈	*		*		Δ				
6		35		11		17		46	29		19	4	58		Δ	☐											☐
7		37		17		28	18		25	0 ^m	17	6	54				♈			☐			☐				☐
8		38		24		39	19		5	1	14	8	49				Δ		♈					☐		☐	♈
9		39		31		50		45	2		11	10	44		☐		Δ				Δ		Δ				
10		40		37	27		2	20		24	3		8	12	39		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
11		40		44		13	21		4	4	5	14	34		♈		☐				☐	☐	☐	☐	☐	☐	☐
12		41		50		24		44	5		2	16	29				☐		☐	☐	☐	☐	☐	☐	☐	☐	☐
13		42		56		36	22		23	5	58	18	24		☐		♈										☐
14		43	5		3	48	23		3	6	54	20	16				*			♈		♈		☐		☐	☐
15		43		9		59		43	7		50	22	7		☐		☐										☐
16		44		15	28	11	24		23	8	45	23	58		Δ					☐	☐	☐	☐	☐	☐	☐	☐
17		45		21		23	25		3	9	39	25	48				Δ		*			☐	☐	☐	☐	☐	☐
18		45		27		35		43	10		33	27	37		☐												☐
19		46		32		47	26		23	11	26	29	25				☐										☐
20		46		38		59	27		3	12	18	1 ^m	12	*													☐
21		46		44	29	11		43	13		10	2	57				*		♈								☐
22		47		50		23	28		27	14		2	4	42				*									☐
23		47		55		35	29		3	14	52	6	26														☐
24		47	6		1	47		43	15		42	8	9				☐										☐
25		47		7		59	0 ^m	24	16		32	9	51		☐			*									☐
26		48		12	0 ^m	11	1	5	17		21	11	32														☐
27	R	48		18		24		46	18		8	13	12														☐
28		48		23		36	2	26	18		54	14	51														☐
29		47		28		49	3	7	19		40	16	25														☐
30		47		33	1		1	48	20		25	18	5	*	*												☐
Date.	♀		♊		Moon's		Date.		Time.		Phenomena.																
	Lat.	Decl.	Lat.	Decl.	Ω																						
2	2° S	3	11° S	42	1° N	32	13° N	50	17	11	3	H. M.															
4		14	12	36		41	12	39	16		50	3	9	24	☐ at Perigee.												
6		26	13	30		46	11	20			37	7	20	0	☐ at First Quarter.												
8		38	14	22		48	9	56			24	11	15	28	☐ at Gt. Elong. 46° E 16'.												
10		50	15	14		53	8	39			11	12	6	26	Full Moon.												
12	3	2	16	4		43	6	55	15		58	13	14	40	☐ on Equator.												
14		14		53		33	5	17			45	15	3	41	☐ at Perihelion.												
16		26		41		30	3	46			32	15	3	49	☐ at Sup ☉												
18		38	18	27		22	2	12			19	18	12	16	☐ at Apogee.												
20		50	19	11		11	0	36			21	6			☐ at Last Quarter.												
22	4	2	54	0		58	0	S 59	14		34	23	21	21	☐ on Equator.												
24		14	20	35		47	2	31			41	25	6	40	☐ centers ☉												
26		25	21	15		34	4	3			29	25	14	17	☐ on Equator.												
28		36		53		21	5	32			17				New Moon.												
30		47	22	26		7	6	59			5																

20		OCTOBER, 1946.										S. J. O. UJJAIN	
Date	Day	Sidereal Time.		☉		☽			Midnight		ψ		
		H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	D			
1	Tu.	12	37	40	7 28	39	2 S 58	14 17	0 S 2	22 S 32	20 11	8 20	
2	W.		41	36	8 27	41	3 21	26 5	1 4	24 27	1 59	22	
3	Th.		45	32	9 26	43	4 4	7 55	2 4	25 17	13 53	24	
4	F.		49	29	10 25	47	4 8	19 55	2 59	24 56	25 58	26	
5	S.		53	25	11 24	54	31	2 6	3 48	23 24	8 19	28	
6	Su.		57	22	12 24	4	54	14 37	4 26	20 43	21 0	30	
7	M.	13	1	18	13 23	17	5 17	27 29	4 52	16 57	4 4	33	
8	Tu.		5	15	14 22	31	40	10 46	5 4	12 14	17 33	35	
9	W.		9	11	15 21	46	6 3	24 27	4 59	6 48	1 26	37	
10	Th.		13	7	16 21	2	26	8 30	4 34	0 52	15 39	39	
11	F.		17	4	17 20	20	48	22 51	3 55	5 14	0 8	41	
12	S.		21	0	18 19	40	7 11	7 23	2 59	11 9	14 42	43	
13	Su.		24	57	19 19	3	34	22 1	1 50	16 30	29 19	45	
14	M.		28	53	20 18	28	56	6 37	0 34	20 52	13 52	47	
15	Tu.		32	49	21 17	55	8 19	21 6	0 44	23 52	28 17	50	
16	W.		36	45	22 17	25	41	5 24	1 58	25 18	12 29	52	
17	Th.		40	41	23 16	57	9 3	19 30	3 32	3 26	29 55		
18	F.		44	37	24 16	31	25	3 24	3 58	23 15	10 15	57	
19	S.		48	37	25 16	8	47	17 3	4 37	20 8	23 48	59	
20	Su.		52	30	26 15	47	10 9	0 30	5 11	59 7	7 8	1	
21	M.		56	27	27 15	28	30	13 43	5 7	11 8	20 16	4	
22	Tu.	14	0	24	28 15	11	52	26 45	4 58	5 52	13 10	6	
23	W.		4	21	29 14	56	11 13	9 33	4 37	0 26	5 52	8	
24	Th.		8	18	0 14 43		34	22 8	3 57	4 56	28 21	10	
25	F.		12	15	1 14 33		55	4 31	3 10	10 3	10 38	12	
26	S.		16	12	2 14 24	12	16	16 42	2 13	14 42	22 44	14	
27	Su.		20	9	3 14 18		36	28 43	1 12	18 43	4 41	16	
28	M.		24	6	4 14 13		57	10 36	0 8	21 55	16 31	18	
29	Tu.		28	3	5 14 10	13	17	22 24	0 36	24 10	28 17	21	
30	W.		32	0	6 14 9		37	4 11	1 57	25 21	10 5	23	
31	Th.	14	35	57	7 14 8		56	16 0	2 54	25 23	21 57	25	
Date	ψ		♈		♉		♊		♋		♌		
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.			
2	1 N 27	1 S 59	0 N 4	23 N 16	0 N 19	18 N 56	1 N 1	11 S 2	0 S 5	13 S 19			
4	"	2	1	"	20	53	1	11	5	13 S 47			
6	"	3	"	"	20	51	0	19	6	14 15			
8	"	5	"	"	20	49	0	28	8	42			
10	"	6	"	"	20	47	0	37	9	15 10			
12	"	8	"	"	21	45	0	46	10	37			
14	"	10	"	"	21	43	0	55	11	16 3			
16	"	11	"	23 15	21	41	0 59	12 4	13	29			
18	"	13	"	"	21	39	59	13	14	55			
20	"	15	"	"	22	37	59	22	15	17 20			
22	"	16	0 5	"	22	36	59	30	16	44			
24	"	18	"	"	20 22	35	59	39	17	18 8			
26	"	20	"	"	23	34	59	48	19	32			
28	"	21	"	"	23	33	59	57	20	55			
30	"	23	"	23 14	23	32	59	13 5	21	19 17			

EPHEMERIS.

OCTOBER, 1946.

21

Date.	Longitudes.												Lunar Aspects.													
	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓	☉	☽	♈	♉	♊	♋	♌	♍	♎	♏	♐	♑	♒	♓
1	21 47	6 38	1 12	4 29	21 9	19 42			*					*				*				*				Δ
2	R 47	43	25 5	10 21	52 21	18			♈					♈			*				*					π
3	47	48	38	51 22	35 22	53			♈	♈				π			*			*						π
4	47	53	50 6	32 23	18 24	27			♈	♈				π			♈			*						π
5	46	57	2 3	13 23	58 26	1			♈	♈				♈			♈			*						π
6	46 7	3	15	54 24	37 27	35			Δ	Δ				Δ			Δ			Δ						♈
7	46	8	27 8	35 25	14 29	8			Δ	Δ				Δ			Δ			Δ						♈
8	45	12	40 9	16 25	51 0	41			π	π				π			π			π						π
9	45	17	53	57 26	26 2	8			π	π				π			π			Δ						Δ
10	44	21 3	6 10	39 27	1 3	34			♈	♈				Δ			Δ			π						Δ
11	44	25	18 11	21 27	33 5	2			♈	*				π			♈			π						Δ
12	43	29	31 12	2 28	5 6	30			π	π				π			♈			♈						Δ
13	42	33	44	44 28	35 7	58			π	π				π			♈			♈						Δ
14	41	37	57 13	25 29	4 9	23			Δ	Δ				Δ			*			π						*
15	40	41 4	10 14	7 29	31 10	46			Δ	♈				♈			♈			π						*
16	39	45	23	49 29	56 12	7			♈	♈				Δ			π			Δ						♈
17	38	48	36 15	31 0	20 13	33			♈	♈				Δ			Δ			Δ						♈
18	37	52	49 16	13 0	42 14	58			*	*				♈			♈			Δ						♈
19	36	56 5	2 55	1	2 16	20			*	*				♈			♈			Δ						♈
20	35	59	15 17	37 1	20 17	41			*	*				♈			♈			Δ						♈
21	34 8	3	28 18	19 1	36 19	0			♈	♈				Δ			♈			*						♈
22	33	6	41 19	1 1	50 20	18			♈	♈				Δ			♈			*						♈
23	32	9	55	43 2	2 21	35			♈	♈				♈			♈			*						♈
24	31	12 6	8 20	25 2	13 22	50			♈	Δ				♈			♈			♈						♈
25	29	15	21 21	8 2	20 24	4			♈	♈				♈			♈			♈						♈
26	28	18	34	50 2	26 25	16			♈	♈				π			♈			♈						Δ
27	27	21	47 22	32 2	29 26	29			♈	♈				π			♈			♈						Δ
28	25	23 7	1 23	15 2	30 27	40			*	*				♈			Δ			♈						Δ
29	23	25	14	57 2 R	27 28	45			♈	♈				♈			♈			♈						Δ
30	21	27	27 24	40 2	22 29	47			*	♈				π			*			♈						π
31	20	29	40 25	23 2	17 0	49			♈	♈				π			♈			♈						π
Date.	☽		☽		Moon's		Date.	Time.		Phenomena.																
	Lat.	Decl.	Lat.	Decl.	♈																					
2	4 S 58	23 S 2	0 S 7	8 S 22	13 54	H. M.																				
4	5 8	35	24 9	51	43	1 12																				
6	18 24	4	36 11	11	32 3	15 21																				
8	27	31	50 12	30	22 9	15 26																				
10	36	57 1	4 13	43	12 11	2 7																				
12	44 25	19	18 14	55	3 11	18 24																				
14	51	40	31 16	4	12 54	12																				
16	57	58	44 17	6	45 12	42																				
18	6 3	26 13	56 18	15	38 15	...																				
20	6	25 2	8 19	10	32 17	18 58																				
22	10	34	19 20	4	26 22	13 39																				
24	11	40	28 20	53	20 25	5																				
26	10	42	36 21	36	15 29	18 49																				
28	8	41	44 22	19	9	...																				
30	3	34	48 22	31	3	...																				

☽ at ♈

☽ at Perigee.

☽ at First Quarter.

☽ on Equator.

☽ Full Moon.

☽ at Aphelion.

☽ at Max. Brilliancy.

☽ at Apogee.

Heliacal Setting of ♄

☽ at Last Quarter.

☽ on Equator.

☉ enters ♎.

New Moon.

☽ at Perigee.

22		NOVEMBER, 1946.										S. J. O. UJJAIN				
Date	Day	Sidereal Time.			☉		☽			Midnight		ψ				
		H.	M.	S.	Long.	Decl.	Long.	Lat.	Decl.	☽						
1 F.	14	39	54	8	14	9	14 S 15	27 57	3 S 44	24 S 15	4 00	9 27				
2 S.		43	51	9	14	12		34 10 57	4 26	21 59	16 18	29				
3 Su.		47	48	10	14	17		54 22 35	4 55	18 39	28 55	31				
4 M.		51	44	11	14	23	15	12 5 24	5 11	16 22	11 57	33				
5 Tu.		55	40	12	19	30		31 18 38	5 11	9 16	25 27	35				
6 W.		59	36	13	14	39		49 2 21	4 53	3 34	9 23	37				
7 Th.	15	3	32	14	14	52	16	7 16 31	4 18	2 N 30	23 44	38				
8 F.		7	28	15	15	7		25 1 8 3	3 22	8 38	8 26	40				
9 S.		11	24	16	15	23		43 15 53	2 10	14 23	23 22	42				
10 Su.		15	21	17	15	40		59 0 11 52	0 59	19 22	8 23	44				
11 M.		19	18	18	15	59	17	16 15 52	0 N 23	23 4	23 20	46				
12 Tu.		23	15	19	16	19		33 0 45	1 43	25 9	8 7	48				
13 W.		27	12	20	15	41		49 15 25	2 55	25 27	22 37	50				
14 Th.		31	8	21	17	5	18	5 29 46	3 54	24 2	6 49	51				
15 F.		35	4	22	17	31		11 13 46	4 39	21 8	20 38	53				
16 S.		39	1	23	17	59		36 27 25	5 6	17 9	4 7	55				
17 Su.		42	58	24	18	29		51 10 44	5 15	12 24	17 16	57				
18 M.		46	54	25	19	1	19	6 23 45	5 9	7 13	0 9	58				
19 Tu.		50	50	26	19	35		20 6 29	4 47	1 59	12 46	10 0				
20 W.		54	47	27	20	11		34 18 59	4 12	3 S 33	25 10	2				
21 Th.		58	44	28	20	48		48 1 17	3 25	8 43	7 22	3				
22 F.	16	2	40	29	21	25	20	1 13 25	2 30	13 29	19 26	5				
23 S.		6	36	0	22	2		14 25 25	1 29	17 41	1 23	6				
24 Su.		10	32	1	22	41		26 7 20	0 24	21 9	13 14	8				
25 M.		14	29	2	23	22		38 19 8	0 S 42	23 42	25 1	9				
26 Tu.		18	26	3	24	5		50 0 55	1 45	25 12	6 48	11				
27 W.		22	23	4	24	50	21	2 12 42	2 44	25 34	18 37	12				
28 Th.		26	20	5	25	37		13 24 33	3 36	24 46	0 31	14				
29 F.		30	17	6	26	25		24 6 31	4 19	22 49	12 34	15				
30 S.	16	34	13	7	27	16		34 18 40	4 52	19 52	24 50	17				

Date	ψ		♈		♉		♊		♋	
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.
1	1 N 27	2 S 24	0 N 5	23 N 14	0 N 24	18 N 31	0 N 59	13 S 13	0 S 22	19 S 38
3	"	25	"	14	24	30	59	22	23	59
5	"	27	"	14	24	30	58	31	24	20
7	"	28	"	13	24	29	58	39	26	40
9	"	30	"	13	25	29	58	47	27	59
11	1 28	32	"	13	25	29	58	56	28	21
13	"	33	"	13	25	28	58	14	4	29
15	"	35	"	12	26	28	58	12	30	51
17	"	36	"	12	26	28	58	20	31	22
19	"	37	"	12	26	28	58	28	32	21
21	"	38	"	12	27	28	58	36	33	35
23	"	40	"	11	27	29	58	44	34	49
25	"	41	"	11	27	29	58	51	35	23
27	"	42	"	11	28	29	58	59	36	11
29	"	43	"	10	28	30	58	15	7	37

EPHEMERIS.										NOVEMBER, 1946.										21	
Date	Longitudes.										Lunar Aspects.										
	♈	♉	♊	♋	♌	♍	♎	♏	♐	☉/ψ/♈/♉/♊/♋/♌/♍/♎/♏	☾/♐/♑/♒/♓	☾/♐/♑/♒/♓	☾/♐/♑/♒/♓	☾/♐/♑/♒/♓	☾/♐/♑/♒/♓	☾/♐/♑/♒/♓					
1	21	19	8	32	7	51	26	6	2	10	1	48				*	*	*			
2		17		34	8		5	49	1	R 59	2	46	□	Δ		Δ		♐			
3		15		36		19	27	31	1	45	3	40				□					
4		13		38		32	28	14	1	30	4	29	Δ	π		π	Δ				
5		12		40		45		57	1	13	5	11		□				π			
6		10		41		58	29	40	0	51	5	47				Δ	π	Δ			
7		8		43	9	11	0	23	0	27	6	17	π	♐	*		Δ	Δ			
8		6		44		24	1	7	0	2	6	43				π	π	π			
9		4		46		37		50	29	m 35	7	4	♐	π	π	□	♐				
10		2		47		50	2	33	29	6	7	19				♐	♐	♐			
11		0		48	10	4	3	17	28	36	7	26	π	Δ	♐	*	π				
12	20	58		49		17	4	0	28	4	7	R 15				π	π	π			
13		56		50		30		44	27	31	7	0	Δ	□	π	♐	Δ	Δ			
14		54		50		43	5	27	26	56	6	34				Δ	Δ	Δ			
15		52		51		56	6	11	26	21	5	59		*		♐	□	♐			
16		50		51	11	9		54	25	45	5	13	□		*		♐				
17		48		52		22	7	38	25	8	4	18		♐		♐	*	♐			
18		45		52		35	8	22	24	32	3	14		*	□		*	♐			
19		43		53		48	9	6	23	56	2	4			♐	*	♐	*			
20		41		53	12	1		49	23	20	0	45			Δ		♐	*			
21		39		53		14	10	33	22	44	29	m 25	♐				♐				
22		37		53		27	11	17	22	9	28	4		π		□	♐	□			
23		34		53		40	12	1	21	36	26	44	♐		π		♐	♐			
24		32		53		53		42	21	10	25	28				Δ	♐	♐			
25		30		53	13	5	13	29	20	33	24	19		*		♐	♐	Δ			
26		27		52		18	14	13	20	10	23	21	♐								
27		25		51		31		57	9	37	22	34		□		π	*	π			
28		23		50		44	15	42	19	12	21	57			π		*	*			
29		21		49		56	16	26	18	48	21	27	*	Δ		♐					
30		18		48	14	9	17	10	18	27	21	13			Δ		□	♐			

Date		☉		☽		Moon's	Time.	Phenomena.
		Lat.	Decl.	Lat.	Decl.	Ω		
1	5 S 57	26 S 25	2 S 52	23 S 20	11	57	2 0	☉ at Gr. Elong. 23° W 34'
3	48	12	53	23	44	54	2 10	☉ at First Quarter.
5	36 25	53	50	23	58	51	7 2	☉ on Equator.
7	21	29	43	24	3	48	9 12	Hel. Set. of ☉ in the West.
9	4	1	32	24	0	46	10 12	Full Moon.
11	4	24	16	23	48	44	16 4	☉ at Perigee.
13	21 23	51	1	55	23	42	18	☉ at Last Quarter.
15	3 56	9	26	2	44	41	18	☉ at Inf. ☉ ☽
17	28 22	26	0	52	21	52	19 20	Hel. Rise of ♊
19	3 0 21	39	13	20	48	40	19 20	☉ on Equator.
21	2 29	20	52	ON 28	19	35	21 22	☉ at ☉
23	1 58	5	1	8	18	20	23 3	☉ at Inf. ☉ ☽
25	27 19	18	4	17	14	40	23 22	☉ enters ♊
27	0 57	18	33	2	8	16	23 22	New Moon.
29	26 17	51	26	15	47	41	24 18	Hel. Rise of ☉ in the East.
							25 20	☉ at Perihelion.

24												DECEMBER, 1946.												S. J. O. UJJAIN											
Date	Day	Sidereal Time.			☉			☽			Midnight			Ψ																					
					Long.	Decl.	Long.	Lat.	Decl.	☽																									
1 Su.	16	38	10	8	28	1	21 S 43	1 4	5 S 12	15 S 58	7 23	10 18																							
2 M.		42	7	9	28	50	52 13	47	5 17	11 16	20 17	20																							
3 Tu.		46	4	10	29	42	22 12	54	5 7	5 55	3 37	21																							
4 W.		50	0	11	30	34	10 10	27	4 39	0 8	17 24	23																							
5 Th.		53	5	12	31	27	18 24	28	3 53	5 N 52	1 38	24																							
6 F.		57	52	13	32	20	26 8	55	2 52	11 45	16 17	25																							
7 S.	17	1	49	14	33	14	33 23	45	1 38	17 7	1 16	26																							
8 Su.		5	54	15	34	10	40 8	51	0 16	21 31	16 27	27																							
9 M.		9	41	16	35	6	46 24	6	1 N 7	24 26	1 45	28																							
10 Tu.		13	38	17	36	2	52 9	20	2 26	25 33	16 53	29																							
11 W.		17	34	18	37	3	57 24	17	3 34	24 46	1 40	31																							
12 Th.		21	31	19	38	3	2 8	57	4 27	23 19	16 8	32																							
13 F.		25	28	20	39	3	7 23	13	5 0	8 31	0 11	33																							
14 S.		29	24	21	40	4	11 7	13	5 32	13 48	13 47	34																							
15 Su.		33	20	22	41	6	15 20	25	5 13	8 35	26 57	35																							
16 M.		37	17	23	42	9	18 3	24	4 55	3 9	9 45	36																							
17 Tu.		41	14	24	43	13	20 16	2	4 22	2 S 17	22 13	37																							
18 W.		45	10	25	44	18	22 28	22	3 38	7 30	4 26	38																							
19 Th.		49	6	26	45	24	24 10	28	2 45	12 21	16 28	39																							
20 F.		53	3	27	46	32	25 22	26	1 45	16 42	28 22	40																							
21 S.		57	0	28	47	41	26 4	17	0 41	20 20	10 11	40																							
22 Su.	18	0	56	29	48	51	27 16	5	0 S 24	23 7	21 58	41																							
23 M.		4	52	0	49	0	27 27	52	1 28	24 54	3 46	42																							
24 Tu.		8	49	1	51	9	26 9	41	2 29	25 34	15 36	42																							
25 W.		12	46	2	52	18	25 21	33	3 23	25 3	27 31	43																							
26 Th.		16	43	3	53	27	24 3	31	4 8	23 23	9 32	44																							
27 F.		20	40	4	54	36	22 15	36	4 43	20 40	21 41	44																							
28 S.		24	37	5	55	45	19 27	50	5 51	7 0	4 2	45																							
29 Su.		28	34	6	56	54	16 10	58	5 13	12 33	16 38	46																							
30 M.		32	30	7	58	3	12 23	0	5 8	7 29	29 28	46																							
31 Tu.	18	36	26	8	59	12	8 6	0	4 45	1 59	12 38	46																							
Date.	ψ		♈		♉		♊		♋		♌																								
	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.	Lat.	Decl.																							
1	1 N 28	2 S 44	0 N 10	23 N 5	0 N 28	18 N 31	0 N 58	15 S 14	0 S 39	23 S 33																									
3	28	45	"	10	28	32	58	22	40	41																									
5	29	46	"	9	29	33	58	29	41	49																									
7	29	47	"	9	29	34	59	36	42	55																									
9	29	48	"	9	29	35	59	43	43	24	1																								
11	29	49	"	8	30	36	59	50	44	6																									
13	29	49	"	8	30	38	59	56	45	9																									
15	29	50	"	8	30	39	59	16	3	46	12																								
17	29	50	"	7	30	41	59	10	46	1																									
19	29	51	"	7	31	43	59	16	47	14																									
21	29	51	"	7	31	45	59	22	48	13																									
23	30	51	"	6	31	47	59	29	49	11																									
25	30	52	"	6	31	49	59	35	50	9																									
27	30	52	"	6	32	51	58	41	51	5																									
29	30	52	"	5	32	53	59	46	51	0																									
31	30	52	"	5	32	56	1	0	52	23	55																								

EPHEMERIS.										DECEMBER, 1946.										25
Date	Longitudes.										Lunar Aspects.									
	☉	☽	♈	♉	♊	♋	♌	♍	♎	♏	☉	☽	♈	♉	♊	♋	♌	♍	♎	♏
1	20	15	8	47	14	21	17	55	18	9	21	9								
2	R	13	R	46		34	18	39	17	R	52	21	16	☐	☐	☐	☐	☐	☐	☐
3		10		44		47	19	24	17		39	21	32							
4		8		43		59	20	9	17		27	21	56	☐	☐	☐	☐	☐	☐	☐
5		5		41	15	12		53	17		18	22	32		*			☐	☐	☐
6		3		39		24	21	38	17		11	23	13	☐	☐	☐	☐	☐	☐	☐
7		0		38		36	22	23	17		7	24	8					☐	☐	☐
8	19	58		36		49	23	8	17		7	24	55	☐	☐	☐	☐	☐	☐	☐
9		55		34	16	1		53	17		7	25	51					☐	☐	☐
10		52		32		13	24	38	17		10	26	57	☐		☐	☐	☐	☐	☐
11		50		30		25	25	23	17		16	27	59	☐				☐	☐	☐
12		47		28		37	26	8	17		24	29	8		*			☐	☐	☐
13		44		26		49		53	17		35	0	2	☐				☐	☐	☐
14		41		23	17	1	27	38	17		48	1	35					☐	☐	☐
15		39		21		13	28	23	18		3	2	51	☐				☐	☐	☐
16		36		18		26	29	8	18		19	4	12					☐	☐	☐
17		33		15		38		53	18		37	5	32					☐	☐	☐
18		31		12		49	0	39	18		58	6	52		*			☐	☐	☐
19		29		9	18	0	1	24	19		21	8	14					☐	☐	☐
20		26		6		12	2	9	19		45	9	37					☐	☐	☐
21		24		3		23		55	20		12	11	2					☐	☐	☐
22		21		0		35	3	40	20		40	12	26		*			☐	☐	☐
23		19	7	56		46	4	26	21		9	13	52	☐				☐	☐	☐
24		16		52		57	5	12	21		38	15	23					☐	☐	☐
25		13		48	19	9		57	22		9	16	54					☐	☐	☐
26		11		45		20	6	43	22		46	18	20					☐	☐	☐
27		9		41		31	7	29	23		24	19	45					☐	☐	☐
28		6		38		42	8	14	24		1	21	14					☐	☐	☐
29		4		34		53	9	0	24		39	22	44		*			☐	☐	☐
30		1		30	20	4		46	25		19	24	14					☐	☐	☐
31	18	58		26		14	10	32	25		59	25	45	☐	☐	☐	☐	☐	☐	☐
Date	☽		☽		Moon's		Date	Time.	Phenomena.											
	Lat.	Decl.	Lat.	Decl.	☉															
1	0 N 2	17 S 12	2 N 36	15 S 33	11 11 41		H. M.	1 8	0	☽ at 2.										
3	30 16	37	38 15	37	42		2 3	13		☽ at First Quarter.										
5	57	6	36 15	54	43		8 22	28		Full Moon.										
7	1 21	15 40	29 16	23	44					Lunar Eclipse.										
9	43	18	19 16	59	45		9 2	31		☽ at Apogee.										
11	2 4	1	7 17	39	46		10			☽ at Gt. Elong. 20° E 44'										
13	22 14	48	1 54	18 22	47		15 16	30		☽ at Last Quarter.										
15	39	40	39 19	7	47		17 1	55		☽ on Equator.										
17	54	35	25 19	51	47		22 15	22		☽ at Perigee.										
19	3 8	34	9 20	33	47		22 16	20		☉ enters ♈										
21	19	36	0 53	21 14	46		23			☽ at Max. Brilliancy.										
23	30	40	37 21	52	46		23 18	37		New Moon.										
25	39	48	22 22	27	45		29 12	0		☽ at ☽										
27	46	59	7 22	56	44															
29	42	11	0 S 14	23 22	42															
31	57	25	35 23	58	39															

Months and Dates.	Latitudes.													
	+5°	+8°	+11°	+14°	+17°	+19°	+23°	+26°	+29°	+32°	+35°			
Jan.	6 6	10 6	16 6	21 6	26 6	31 6	34 6	42 6	48 6	55 7	2 7	9		
	13	11	16	21	26	31	36	44	50	56	1	8		
	20	14	19	23	26	32	36	44	50	56	0	6		
	27	16	19	24	27	31	35	42	46	50	6	58		
Feb.	3	16	19	23	27	31	34	40	44	48	53	6 58		
	10	16	19	22	25	29	31	36	40	44	48	52		
	17	15	17	20	23	26	28	32	35	38	41	45		
	24	14	16	18	20	22	24	26	29	31	34	37		
Mar.	3	12	13	15	16	18	19	21	23	24	27	28		
	10	8	9	10	12	13	14	15	16	17	18	19		
	17	5	6	6	6	8	8	8	9	9	9	9		
	24	3	2	2	2	2	2	2	1	0	0	0		
	31	0	5	5	5	5	5	5	5	5	5	50		
Apr.	7	5	57	55	53	52	51	49	48	46	45	43	40	
	14	54	51	49	48	46	44	41	39	36	33	30		
	21	51	49	46	44	41	39	35	32	29	26	22		
	28	49	46	43	50	36	34	30	26	22	18	13		
May	5	48	44	41	37	33	30	25	20	16	11	6		
	12	47	43	39	34	30	27	20	15	11	5	4	59	
	19	46	41	37	32	28	25	18	12	7	1	54		
	26	46	41	36	31	26	23	15	9	3	4	57	50	
June	2	46	41	36	31	26	22	14	8	2	54	47		
	9	47	42	36	31	26	22	14	7	1	53	46		
	16	48	43	37	32	26	22	14	7	1	53	45		
	23	50	45	39	34	28	24	16	9	3	55	46		
	30	51	46	40	35	29	25	17	11	5	57	49		
July	7	53	48	42	37	31	28	20	13	7	59	52		
	14	54	50	44	39	34	30	22	16	10	5	3	56	
	21	55	51	45	41	36	33	25	20	14	7	5	0	
	28	56	52	47	43	38	35	28	23	18	12	6		
Aug.	4	57	53	49	45	40	37	31	27	22	16	11		
	11	56	53	49	45	42	39	34	30	2	21	16		
	18	56	53	50	47	44	42	37	33	29	25	21		
	25	55	53	50	48	45	43	39	36	33	30	27		
Sep.	1	54	52	50	48	46	44	42	39	37	35	32		
	8	52	51	50	49	49	46	44	43	41	39	37		
	15	51	50	50	49	48	47	46	45	44	44	42		
	22	50	49	49	49	49	49	49	48	48	48	47		
	29	48	49	49	49	50	50	50	52	52	52	52		
Oct.	6	46	47	48	49	51	52	53	54	55	56	58		
	13	45	47	48	50	52	54	56	57	59	6	4		
	20	45	47	50	52	54	55	58	6	1	6	9		
	27	45	48	51	53	56	58	6	2	5	8	12	16	
Nov.	3	45	49	52	55	58	6	1	6	10	14	18	22	
	10	47	50	54	58	6	2	5	10	14	18	24	29	
	17	48	52	57	6	1	5	8	15	19	24	30	36	
	24	50	55	6	0	4	9	12	19	25	30	36	43	
Dec.	1	53	58	3	8	13	16	24	30	36	42	49		
	8	56	6	1	7	12	18	21	29	35	41	48	55	
	15	6	0	5	11	16	21	25	33	39	45	53	7	0
	22	3	8	14	20	25	29	37	43	50	57	7	4	
	29	6	11	17	23	28	32	40	46	53	7	0	7	

Months and Dates.	Latitudes.											
	+5°	+8°	+11°	+14°	+17°	+19°	+23°	+26°	+29°	+32°	+35°	
Jan. 6	18	1	17	56	17	51	17	46	17	39	17	36
13	4	59	54	50	45	42	34	29	23	17	10	17
20	7	18	3	58	54	49	46	39	33	28	22	16
27	9	6	18	2	57	53	50	44	39	34	28	23
Feb. 3	12	8	5	18	1	57	54	48	44	39	35	30
10	13	10	7	3	18	0	57	52	49	45	41	37
17	13	11	8	5	3	18	1	57	54	51	48	44
24	13	11	9	7	5	3	18	1	58	56	53	50
Mar. 3	13	11	10	8	7	6	4	18	2	18	1	59
10	12	11	11	10	9	8	7	6	5	18	4	18
17	12	11	11	11	10	10	10	10	9	9	9	9
24	10	11	11	11	12	12	12	13	13	14	14	14
31	9	10	11	12	13	14	15	16	18	20	21	23
Apr. 7	8	10	12	12	14	16	18	20	23	25	28	31
14	7	9	12	13	16	18	20	23	26	29	32	36
21	7	9	12	15	17	19	23	26	29	32	36	
28	6	9	12	15	19	21	26	30	34	38	42	
May 5	6	10	13	17	21	24	29	33	38	43	48	
12	6	10	13	19	24	26	33	38	42	48	54	
19	7	11	16	20	25	28	35	41	46	52	54	
26	8	13	18	23	28	31	39	44	50	57	19	4
June 2	10	15	20	25	31	34	42	48	54	19	1	8
9	12	17	22	27	33	36	45	51	58	5	12	
16	13	18	24	29	35	38	47	53	19	0	8	16
23	15	20	25	31	36	40	49	55	2	9	17	
30	16	21	26	32	37	41	50	55	3	10	18	
July 7	17	22	27	32	38	41	50	56	3	10	17	
14	17	22	27	32	38	41	49	55	1	8	15	
21	18	22	27	31	36	40	47	51	18	58	5	12
28	17	21	26	30	35	38	44	49	55	0	7	
Aug. 4	16	19	23	28	32	34	41	46	50	18	56	1
11	14	18	21	25	28	31	36	40	45	49	18	54
18	12	15	18	21	24	26	31	34	38	42	46	
25	10	12	14	17	19	21	25	27	30	33	37	
Sep. 1	6	8	10	12	14	16	18	20	24	25	28	
8	3	4	6	7	9	10	11	13	15	16	18	
15	0	1	1	1	2	3	4	5	6	7	8	
22	17	56	17	56	17	56	17	57	17	57	17	58
29	53	5	52	51	51	51	51	50	49	49	48	
Oct. 6	50	49	48	46	45	44	43	42	41	40	38	
13	47	45	44	42	40	39	37	35	33	31	29	
20	44	42	40	38	36	34	31	29	26	23	20	
27	42	40	37	34	32	30	26	22	19	16	12	
Nov. 3	41	38	35	32	28	26	21	17	13	9	5	
10	41	38	34	30	26	23	17	13	9	4	16	59
17	41	38	33	29	24	21	15	10	5	16	59	54
24	42	38	33	29	24	17	14	8	3	57	50	
Dec. 1	44	39	34	29	24	17	13	8	2	56	49	
8	46	41	36	31	26	23	15	8	2	55	48	
15	50	45	39	34	28	25	17	10	4	57	50	
22	53	48	43	37	32	28	20	13	7	17	0	52
29	57	53	46	41	35	32	24	17	11	4	56	

The position of Pluto and mean longitudes
of ☉, ♃ and ♁ in 1946.

Month and Date.	Pluto.			Sun.	Moon.	Moon's Node.
	Long.	Lat.	Decl.			
Jan.	1 11 17 11 11 R 4 21 10 51 31 10 38	6 N 26 28 29 30	23 N 35 40 45 49	280 19 2 290 10 26 300 1 49 309 53 12	257 14 7 28 59 57 160 45 48 292 31 38	29 27 49 28 56 3 28 24 16 27 52 30
Feb.	10 10 23 20 10 10	31 32	55 58	319 44 35 329 35 59	64 17 28 196 3 18	27 20 44 26 48 57
March	2 9 58 12 9 47 22 9 38	31 24 30 30	1 3 5	339 27 22 349 18 45 359 10 9	327 49 9 99 34 59 231 20 49	26 17 11 25 45 25 25 13 38
April	1 9 32 11 9 27 21 9 27	29 28 27	6 7 6	9 1 32 18 52 55 28 44 19	3 6 39 134 52 30 266 38 20	24 41 52 24 10 6 23 38 19
May	1 9 28 11 9 30 21 9 36 31 9 44	26 25 24 23 23	5 4 1 58	38 35 42 48 27 5 58 18 28 68 9 52	38 24 10 170 10 1 301 55 51 73 41 41	23 6 33 22 34 47 22 3 0 21 31 14
June	10 9 55 20 10 9 30 10 22	22 22 21	54 50 46	78 1 15 87 52 38 97 44 2	205 27 32 337 13 22 108 59 12	20 59 28 20 27 41 19 55 55
July	10 10 38 20 10 56 30 11 14	21 22 22	41 35 31	107 35 25 117 26 48 127 18 12	240 45 2 12 30 53 144 16 43	19 24 9 18 52 23 18 20 37
August	9 11 33 19 11 54 29 12 9	23 24 25	27 23 19	137 9 35 147 0 58 156 52 22	276 2 33 47 48 24 179 34 14	17 48 50 17 17 4 16 45 18
Sep.	8 12 25 18 12 40 28 12 53	27 29 31	15 12 11	160 43 45 176 35 8 186 26 31	311 20 4 83 5 55 214 51 45	16 13 31 15 41 45 15 9 59
Oct.	8 13 4 18 13 11 28 13 17	33 35 37	10 10 11	196 17 55 206 9 18 216 0 41	346 37 35 118 23 25 250 9 15	14 38 13 14 6 26 13 34 40
Nov.	7 13 18 17 13 19 27 13 R 18	40 43 45	13 15 18	225 52 5 235 43 28 245 34 51	21 55 6 153 40 56 285 26 46	13 2 54 12 31 7 11 59 21
Dec.	7 13 14 17 13 6 27 12 57 31 12 52	47 50 52 52	21 26 31 33	255 26 14 265 17 38 275 9 1 279 5 34	57 12 37 188 58 27 320 44 17 13 26 38	11 27 35 10 55 48 10 24 2 11 18

Ending Moments of Tithis for each date in 1946
(calculated in I. S. T.)

Date.	January.		February.		March.		April.		May.		June.	
	Ti.	Time.	Ti.	Time.	Ti.	Time.	Ti.	Time.	Ti.	Time.	Ti.	Time.
1	28	14 36	29	10 18	27	2 48	29	12 48	30	18 46	2	19 12
2	29	16 36	30	10 11	28	2 24	30	10 4	1	15 0	3	16 0
3	30	17 56	1	8 30	{ 29 1 12 } 30 23 29		1	7 12	2	11 24	4	13 18
4	1	18 42	2	8 24		1	21 18	2	3 42	3	8 6	5
5	2	19 12	3	6 42	2	18 48	{ 3 0 24 } 4 20 18		4	5 6	6	10 12
6	3	19 3	4	4 54	3	16 0		5	18 36	5	2 30	7
7	4	18 30	5	3 0	4	13 30	6	16 12	{ 6 0 42 } 7 23 18		8	9 48
8	5	17 42	{ 6 2 0 } 7 22 0		5	11 0	7	14 24		8	22 24	9
9	6	16 30		8	21 24	6	8 36	8	12 54	9	22 30	10
10	7	14 54	9	18 54	7	6 30	9	12 12	10	23 6	11	14 18
11	8	12 54	10	16 48	8	4 42	10	11 48	11	..	12	16 30
12	9	10 42	11	15 1	9	3 12	11	11 48	11	0 18	13	19 12
13	10	8 18	12	13 30	10	2 0	12	12 42	12	1 24	14	21 48
14	11	6 0	13	12 54	11	1 6	13	13 12	13	3 24	15	..
15	12	3 30	14	10 54	12	0 30	14	14 30	14	5 6	15	0 8
16	{ 13 0 50 } 14 23 36		15	9 58	13	0 24	15	16 20	15	8 26	16	2 24
17		15	20 13	16	9 42	14	0 24	16	18 18	16	10 24	17
18	16	18 30	17	9 54	15	1 1	17	20 42	17	13 18	18	5 54
19	17	17 24	18	10 36	16	1 48	18	23 12	18	15 54	19	7 0
20	18	17 0	19	11 48	17	3 18	19	..	19	18 0	20	7 36
21	19	17 10	20	13 48	18	5 18	19	1 54	20	19 54	21	7 42
22	20	17 48	21	16 0	19	7 48	20	4 24	21	20 54	22	7 6
23	21	19 12	22	18 36	20	9 54	21	6 36	22	21 24	23	5 54
24	22	21 12	23	21 12	21	12 42	22	8 12	23	21 6	24	4 6
25	23	23 42	24	23 24	22	15 6	23	8 48	24	20 5	{ 25 1 48 } 26 23 1	
26	24	..	25	..	23	16 48	24	8 12	25	18 30		27
27	24	2 24	25	1 18	24	17 48	25	8 18	26	15 54	28	16 30
28	25	4 54	26	2 24	25	18 36	26	6 48	27	12 48	29	13 0
29	26	7 6	..	..	26	18 24	27	4 30	28	9 42	30	9 37
30	27	9 0	..	..	27	17 48	{ 28 1 42 } 29 22 3		29	6 6	1	6 24
31	28	10 0	..	..	28	16 12		..	..	{ 30 2 18 } 1 22 30	..	..

Date.	Aspect	Time.	Distance.	Date.	Aspect	Time.	Distance.	Date.	Aspect.	Time.	Distance.
January.											
1	δ ϵ ψ	20 33	0	11	δ ϵ ψ	17 58	0	31	δ ϵ ψ	2 20	1
3	δ ϵ ψ	1 40	0	12	δ ϵ ψ	0 53	2	31	δ ϵ ψ	15 24	0
4	δ ϵ ψ	12 11	2	13	δ ϵ ψ	7 42	1	31	δ ϵ ψ	16 36	0
4	δ ϵ ψ	21 23	1	14	δ ϵ ψ	16 7	1	June.			
10	δ ϵ ψ	6 22	3	15	δ ϵ ψ	19 32	1	2	δ ϵ ψ	5 50	0
11	δ ϵ ψ	11 54	3	16	δ ϵ ψ	0 36	5	3	δ ϵ ψ	0 31	2
12	δ ϵ ψ	13 5	0	17	δ ϵ ψ	21 52	0	5	δ ϵ ψ	2 10	2
14	δ ϵ ψ	6 29	1	18	δ ϵ ψ	23 54	0	8	δ ϵ ψ	12 47	1
14	δ ϵ ψ	20 26	4	19	δ ϵ ψ	3 41	0	9	δ ϵ ψ	5 14	3
16	δ ϵ ψ	2 24	0	20	δ ϵ ψ	2 25	3	9	δ ϵ ψ	11 38	0
16	δ ϵ ψ	15 43	0	21	δ ϵ ψ	20 30	4	14	δ ϵ ψ	13 7	0
16	δ ϵ ψ	22 47	3	22	δ ϵ ψ	8 32	2	15	δ ϵ ψ	0 11	0
17	δ ϵ ψ	10 20	1	23	δ ϵ ψ	10 14	1	16	δ ϵ ψ	14 15	0
17	δ ϵ ψ	11 56	2	24	δ ϵ ψ	14 33	2	17	δ ϵ ψ	0 48	1
17	δ ϵ ψ	13 37	1	25	δ ϵ ψ	6 14	1	17	δ ϵ ψ	14 15	2
17	δ ϵ ψ	20 17	2	26	δ ϵ ψ	9 57	0	20	δ ϵ ψ	11 5	3
20	δ ϵ ψ	17 34	4	27	δ ϵ ψ	12 0	0	24	δ ϵ ψ	0 17	2
23	δ ϵ ψ	6 39	0	28	δ ϵ ψ	12 0	0	24	δ ϵ ψ	11 9	1
23	δ ϵ ψ	7 33	2	29	δ ϵ ψ	12 0	0	28	δ ϵ ψ	4 31	0
23	δ ϵ ψ	18 16	1	30	δ ϵ ψ	12 0	0	29	δ ϵ ψ	9 37	1
24	δ ϵ ψ	18 55	3	April.				30	δ ϵ ψ	16 20	2
28	δ ϵ ψ	17 23	1	3	δ ϵ ψ	5 25	2	July.			
31	δ ϵ ψ	10 34	2	3	δ ϵ ψ	11 57	3	1	δ ϵ ψ	5 51	2
31	δ ϵ ψ	14 7	1	6	δ ϵ ψ	15 25	0	2	δ ϵ ψ	2 18	2
February.				9	δ ϵ ψ	1 27	1	3	δ ϵ ψ	15 58	3
1	δ ϵ ψ	12 52	1	9	δ ϵ ψ	12 19	0	5	δ ϵ ψ	20 5	1
1	δ ϵ ψ	20 49	1	14	δ ϵ ψ	11 22	3	6	δ ϵ ψ	19 48	3
2	δ ϵ ψ	10 12	3	15	δ ϵ ψ	2 53	0	11	δ ϵ ψ	23 15	0
2	δ ϵ ψ	10 29	1	16	δ ϵ ψ	8 53	2	14	δ ϵ ψ	14 51	2
6	δ ϵ ψ	11 31	0	18	δ ϵ ψ	8 38	2	15	δ ϵ ψ	3 3	2
7	δ ϵ ψ	19 46	2	23	δ ϵ ψ	15 52	2	16	δ ϵ ψ	2 11	7
11	δ ϵ ψ	2 9	1	29	δ ϵ ψ	21 53	1	18	δ ϵ ψ	3 39	2
11	δ ϵ ψ	7 24	1	30	δ ϵ ψ	10 31	3	18	δ ϵ ψ	23 18	3
13	δ ϵ ψ	7 38	3	May.				20	δ ϵ ψ	10 27	1
13	δ ϵ ψ	15 16	1	1	δ ϵ ψ	18 46	3	21	δ ϵ ψ	9 38	2
15	δ ϵ ψ	12 0	0	3	δ ϵ ψ	8 50	2	22	δ ϵ ψ	2 41	0
16	δ ϵ ψ	9 58	3	4	δ ϵ ψ	2 26	3	25	δ ϵ ψ	14 28	0
16	δ ϵ ψ	17 2	4	5	δ ϵ ψ	7 37	1	28	δ ϵ ψ	8 17	2
16	δ ϵ ψ	18 34	4	6	δ ϵ ψ	11 9	2	29	δ ϵ ψ	17 24	3
19	δ ϵ ψ	14 47	0	7	δ ϵ ψ	16 32	2	29	δ ϵ ψ	7 5	8
21	δ ϵ ψ	4 5	2	12	δ ϵ ψ	7 25	1	August.			
25	δ ϵ ψ	1 20	1	13	δ ϵ ψ	8 45	2	1	δ ϵ ψ	0 12	3
27	δ ϵ ψ	22 8	1	14	δ ϵ ψ	16 32	2	2	δ ϵ ψ	8 0	4
27	δ ϵ ψ	14 21	2	16	δ ϵ ψ	2 33	2	2	δ ϵ ψ	4 23	1
March.				18	δ ϵ ψ	4 19	0	2	δ ϵ ψ	20 51	4
3	δ ϵ ψ	23 30	4	18	δ ϵ ψ	16 21	1	2	δ ϵ ψ	9 1	3
4	δ ϵ ψ	13 8	2	21	δ ϵ ψ	2 33	2	8	δ ϵ ψ	9 13	0
5	δ ϵ ψ	16 17	3	22	δ ϵ ψ	23 46	2	9	δ ϵ ψ	9 46	0
				26	δ ϵ ψ	20 43	1				
				27	δ ϵ ψ	16 46	4				
				31	δ ϵ ψ	1 0	1				

Date.	Aspect</
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Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.
January.											
		H. M.			H. M.			H. M.			H. M.
2	☉ ♋	12 0	7	☉ ♋	15 2	9	☉ ♋	18 23	13	☉ ♋	21 35
2	☉ ♋	12 21	7	☉ ♋	16 50	9	☉ ♋	19 34	13	☉ ♋	22 26
3	☉ ♋	13 26	8	☉ ♋	22 50	10	☉ ♋	23 53	14	☉ ♋	24 47
4	☉ ♋	1 26	9	☉ ♋	5 35	11	☉ ♋	7 37	15	☉ ♋	10 31
5	☉ ♋	11 14	9	☉ ♋	17 5	13	☉ ♋	12 0	17	☉ ♋	15 12
5	☉ ♋	19 18	9	☉ ♋	21 30	13	☉ ♋	15 12	17	☉ ♋	18 23
6	☉ ♋	3 28	10	☉ ♋	8 8	14	☉ ♋	18 23	18	☉ ♋	21 35
6	☉ ♋	12 19	10	☉ ♋	7 24	14	☉ ♋	21 35	18	☉ ♋	24 47
7	☉ ♋	1 23	12	☉ ♋	4 6	16	☉ ♋	24 47	20	☉ ♋	27 59
7	☉ ♋	3 19	12	☉ ♋	8 18	16	☉ ♋	27 59	20	☉ ♋	31 11
8	☉ ♋	3 47	13	☉ ♋	20 31	17	☉ ♋	31 11	21	☉ ♋	34 23
8	☉ ♋	11 12	13	☉ ♋	3 47	17	☉ ♋	34 23	21	☉ ♋	37 35
10	☉ ♋	12 55	14	☉ ♋	23 13	18	☉ ♋	37 35	22	☉ ♋	40 47
11	☉ ♋	4 0	14	☉ ♋	10 40	18	☉ ♋	40 47	22	☉ ♋	43 59
12	☉ ♋	13 5	15	☉ ♋	12 23	19	☉ ♋	43 59	23	☉ ♋	47 11
13	☉ ♋	23 52	15	☉ ♋	12 0	19	☉ ♋	47 11	23	☉ ♋	50 23
14	☉ ♋	6 29	16	☉ ♋	13 28	20	☉ ♋	50 23	24	☉ ♋	53 35
15	☉ ♋	4 19	16	☉ ♋	14 7	20	☉ ♋	53 35	24	☉ ♋	56 47
15	☉ ♋	11 43	17	☉ ♋	3 44	21	☉ ♋	56 47	25	☉ ♋	59 59
15	☉ ♋	17 5	17	☉ ♋	2 3	21	☉ ♋	59 59	25	☉ ♋	63 11
16	☉ ♋	2 24	18	☉ ♋	19 54	22	☉ ♋	63 11	26	☉ ♋	66 23
16	☉ ♋	22 47	18	☉ ♋	13 2	22	☉ ♋	66 23	26	☉ ♋	69 35
17	☉ ♋	4 35	20	☉ ♋	16 57	23	☉ ♋	69 35	27	☉ ♋	72 47
17	☉ ♋	8 48	20	☉ ♋	1 12	23	☉ ♋	72 47	27	☉ ♋	75 59
19	☉ ♋	6 19	21	☉ ♋	9 52	24	☉ ♋	75 59	28	☉ ♋	79 11
19	☉ ♋	18 29	21	☉ ♋	14 53	25	☉ ♋	79 11	28	☉ ♋	82 23
20	☉ ♋	11 40	22	☉ ♋	10 21	25	☉ ♋	82 23	29	☉ ♋	85 35
20	☉ ♋	17 38	22	☉ ♋	13 34	26	☉ ♋	85 35	29	☉ ♋	88 47
20	☉ ♋	19 28	23	☉ ♋	0 0	26	☉ ♋	88 47	30	☉ ♋	91 59
22	☉ ♋	4 37	23	☉ ♋	2 17	27	☉ ♋	91 59	30	☉ ♋	95 11
23	☉ ♋	6 46	24	☉ ♋	11 8	27	☉ ♋	95 11	31	☉ ♋	98 23
23	☉ ♋	7 33	24	☉ ♋	5 3	28	☉ ♋	98 23			
23	☉ ♋	18 16	25	☉ ♋	14 20	28	☉ ♋	101 35			
27	☉ ♋	16 51	25	☉ ♋	16 22	29	☉ ♋	104 47			
29	☉ ♋	6 35	26	☉ ♋	19 26	30	☉ ♋	107 59			
29	☉ ♋	22 15	27	☉ ♋	5 18	31	☉ ♋	111 11			
31	☉ ♋	8 32	27	☉ ♋	10 50						
31	☉ ♋	14 50	27	☉ ♋	11 40						
February.											
		H. M.			H. M.			H. M.			H. M.
1	☉ ♋	12 52	1	☉ ♋	9 41	1	☉ ♋	18 23	1	☉ ♋	21 35
2	☉ ♋	22 55	2	☉ ♋	14 42	2	☉ ♋	21 35	2	☉ ♋	24 47
3	☉ ♋	5 25	3	☉ ♋	15 17	3	☉ ♋	24 47	3	☉ ♋	27 59
3	☉ ♋	16 5	4	☉ ♋	5 15	4	☉ ♋	27 59	4	☉ ♋	31 11
4	☉ ♋	1 13	4	☉ ♋	14 44	5	☉ ♋	31 11	5	☉ ♋	34 23
4	☉ ♋	21 56	5	☉ ♋	21 21	6	☉ ♋	34 23	6	☉ ♋	37 35
5	☉ ♋	13 18	6	☉ ♋	16 45	6	☉ ♋	37 35	7	☉ ♋	40 47
6	☉ ♋	12 0	7	☉ ♋	11 5	7	☉ ♋	40 47	8	☉ ♋	43 59
6	☉ ♋	14 37	7	☉ ♋	6 29	8	☉ ♋	43 59	9	☉ ♋	47 11
			7	☉ ♋	22 25	8	☉ ♋	47 11	10	☉ ♋	50 23
March.											
		H. M.			H. M.			H. M.			H. M.
1	☉ ♋	9 41	1	☉ ♋	14 42	1	☉ ♋	18 23	1	☉ ♋	21 35
2	☉ ♋	14 42	2	☉ ♋	15 17	2	☉ ♋	21 35	2	☉ ♋	24 47
3	☉ ♋	5 15	3	☉ ♋	5 15	3	☉ ♋	24 47	3	☉ ♋	27 59
4	☉ ♋	1 13	4	☉ ♋	14 44	4	☉ ♋	27 59	4	☉ ♋	31 11
4	☉ ♋	21 56	5	☉ ♋	21 21	5	☉ ♋	31 11	5	☉ ♋	34 23
5	☉ ♋	13 18	6	☉ ♋	16 45	6	☉ ♋	34 23	6	☉ ♋	37 35
6	☉ ♋	12 0	7	☉ ♋	11 5	7	☉ ♋	37 35	7	☉ ♋	40 47
6	☉ ♋	14 37	7	☉ ♋	6 29	8	☉ ♋	40 47	8	☉ ♋	43 59
			7	☉ ♋	22 25	8	☉ ♋	43 59	9	☉ ♋	47 11
April.											
		H. M.			H. M.			H. M.			H. M.
4	☉ ♋	5 55	4	☉ ♋	19 34	4	☉ ♋	21 35	4	☉ ♋	24 47
4	☉ ♋	19 34	5	☉ ♋	23 9	5	☉ ♋	24 47	5	☉ ♋	27 59
6	☉ ♋	14 29	6	☉ ♋	5 5	6	☉ ♋	27 59	6	☉ ♋	31 11
8	☉ ♋	23 22	8	☉ ♋	20 45	8	☉ ♋	31 11	9	☉ ♋	34 23
10	☉ ♋	2 3	10	☉ ♋	11 24	10	☉ ♋	34 23	11	☉ ♋	37 35
13	☉ ♋	6 11	13	☉ ♋	15 28	13	☉ ♋	37 35	14	☉ ♋	40 47
15	☉ ♋	1 15	15	☉ ♋	24 15	15	☉ ♋	40 47	16	☉ ♋	43 59
17	☉ ♋	1 25	17	☉ ♋	6 11	17	☉ ♋	43 59	18	☉ ♋	47 11
19	☉ ♋	16 26	19	☉ ♋	16 26	19	☉ ♋	47 11	20	☉ ♋	50 23
20	☉ ♋	12 42	20	☉ ♋	12 42	20	☉ ♋	50 23	21	☉ ♋	53 35
20	☉ ♋	19 0	21	☉ ♋	19 0	21	☉ ♋	53 35	22	☉ ♋	56 47
22	☉ ♋	13 45	22	☉ ♋	21 0	22	☉ ♋	56 47	23	☉ ♋	59 59
22	☉ ♋	19 54	23	☉ ♋	21 0	23	☉ ♋	59 59	24	☉ ♋	63 11
24	☉ ♋	18 0	24	☉ ♋	18 0	24	☉ ♋	63 11	25	☉ ♋	66 23
27	☉ ♋	9 36	27	☉ ♋	9 36	27	☉ ♋	66 23	28	☉ ♋	69 35
27	☉ ♋	14 32	28	☉ ♋	14 32	28	☉ ♋	69 35	29	☉ ♋	72 47
28	☉ ♋	10 14	29	☉ ♋	10 14	29	☉ ♋	72 47	30	☉ ♋	75 59
30	☉ ♋	15 22	30	☉ ♋	15 22	30	☉ ♋	75 59			
May.											
		H. M.			H. M.			H. M.			H. M.
2	☉ ♋	3 9	2	☉ ♋	15 38	2	☉ ♋	18 23	2	☉ ♋	21 35
2	☉ ♋	15 38	3	☉ ♋	11 58	3	☉ ♋	21 35	3	☉ ♋	24 47
3	☉ ♋	11 58	3	☉ ♋	14 48	4	☉ ♋	24 47	4	☉ ♋	27 59
3	☉ ♋	14 48	4	☉ ♋	10 44	4	☉ ♋	27 59	5	☉ ♋	31 11
4	☉ ♋	1 14	5	☉ ♋	1 14	5	☉ ♋	31 11	6	☉ ♋	34 23
1	☉ ♋	11 0	6	☉ ♋	1 14	6	☉ ♋	34 23	7	☉ ♋	37 35
1	☉ ♋	11 0	7	☉ ♋	1 14	7	☉ ♋	37 35	8	☉ ♋	40 47
3	☉ ♋	23 31	8	☉ ♋	23 31	8	☉ ♋	40 47	9	☉ ♋	43 59
4	☉ ♋	3 17	9	☉ ♋	3 17	9	☉ ♋	43 59	10	☉ ♋	47 11
4	☉ ♋	10 44	10	☉ ♋	10 44	10	☉ ♋	47 11	11	☉ ♋	50 23
June.											
		H. M.			H. M.			H. M.			H. M.
1	☉ ♋	1 14	1	☉ ♋	15 38	1	☉ ♋	18 23	1	☉ ♋	21 35
1	☉ ♋	15 38	2	☉ ♋	11 58	2	☉ ♋	21 35	2	☉ ♋	24 47
3	☉ ♋	23 31	3	☉ ♋	14 48	3	☉ ♋	24 47	3	☉ ♋	27 59
4	☉ ♋	3 17	4	☉ ♋	10 44	4	☉ ♋	27 59	4	☉ ♋	31 11
4	☉ ♋	10 44	5	☉ ♋	1 14	5	☉ ♋	31 11	5	☉ ♋	34 23
5	☉ ♋	1 14	6	☉ ♋	1 14	6	☉ ♋	34 23	6	☉ ♋	37 35
6	☉ ♋	1 14	7	☉ ♋	1 14	7	☉ ♋	37 35	7	☉ ♋	40 47
7	☉ ♋	1 14	8	☉ ♋	1 14	8	☉ ♋	40 47	8	☉ ♋	43 59
8	☉ ♋	1 14	9	☉ ♋	1 14	9	☉ ♋	43 59	9	☉ ♋	47 11
9	☉ ♋	1 14	10	☉ ♋	1 14	10	☉ ♋	47 11	10	☉ ♋	50 23
10	☉ ♋	1 14	11	☉ ♋	1 14	11	☉ ♋	50 23	11	☉ ♋	53 35
11	☉ ♋	1 14	12	☉ ♋	1 14	12	☉ ♋	53 35	12	☉ ♋	56 47
12	☉ ♋	1 14	13	☉ ♋	1 14	13	☉ ♋	56 47	13	☉ ♋	59 59
13	☉ ♋	1 14	14	☉ ♋	1 14	14	☉ ♋	59 59	14	☉ ♋	63 11
14	☉ ♋	1 14	15	☉ ♋	1 14	15	☉ ♋	63 11	15	☉ ♋	66 23
15	☉ ♋	1 14	16	☉ ♋	1 14	16	☉ ♋	66 23	16	☉ ♋	69 35
16	☉ ♋	1 14	17	☉ ♋	1 14	17	☉ ♋	69 35	17	☉ ♋	72 47
17	☉ ♋	1 14	18	☉ ♋	1 14	18	☉ ♋	72 47	18	☉ ♋	75 59
18	☉ ♋	1 14	19	☉ ♋	1 14	19	☉ ♋	75 59	19	☉ ♋	79 11
19	☉ ♋	1 14	20	☉ ♋	1 14	20	☉ ♋	79 11	20	☉ ♋	82 23
20	☉ ♋	1 14	21	☉ ♋	1 14	21	☉ ♋	82 23	21	☉ ♋	85 35
21	☉ ♋	1 14	22	☉ ♋	1 14	22	☉ ♋	85 35	22	☉ ♋	88 47
22	☉ ♋	1 14	23	☉ ♋	1 14	23	☉ ♋	88 47	23	☉ ♋	91 59
23	☉ ♋	1 14	24	☉ ♋	1 14	24</					

Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.
December.					H. M.			H. M.			H. M.
1	♂ ♀	2 24	8	♂ ♀	19 22	20	♂ ♀	10 30	27	♂ ♀	2 5
1	♂ ♀	17 30	9	♂ ♀	1 58	20	♂ ♀	20 8	27	♂ ♀	7 28
1	♂ ♀	23 12	10	♂ ♀	2 18	21	♂ ♀	3 42	27	♂ ♀	18 0
3	♂ ♀	8 20	12	♂ ♀	15 43	22	♂ ♀	5 43	29	♂ ♀	9 24
4	♂ ♀	11 29	15	♂ ♀	4 42	22	♂ ♀	8 22	29	♂ ♀	12 22
6	♂ ♀	1 49	15	♂ ♀	9 36	24	♂ ♀	12 21	31	♂ ♀	18 35
6	♂ ♀	4 41	16	♂ ♀	2 3	26	♂ ♀	19 22	31	♂ ♀	19 18
7	♂ ♀	13 38	19	♂ ♀	10 35	26	♂ ♀	22 44	31	♂ ♀	19 48

Heliacal Risings and Settings of all Planets in 1946.

Mercury.

Sets.

Rises.

20th Jan. in East	25th Feb. in West
20th Mar. in West	31st Mar. in East
18th May in East	10th June in West
21st July in West	10th Aug. in East
3rd Sept. in East	9th Oct. in West
15th Nov. in West	27th Nov. in East
31st Dec. in East	

Venus.

Sets.

Rises.

26-12-45 in East	8-3-46 in West
9-11-46 in West	23-11-46 in East

Saturn.

Sets on 3rd July 1946.
Rises on 7th August 1946.

Moonrise.

5th January.	29th July.
3rd February.	28th August.
5th March.	26th September.
3rd April.	26th October.
2nd May.	25th November.
1st June.	25th December.
30th June	

Jupiter.

Sets on 15th October 1946.
Rises on 18th November 1946.

Mars.

Sets on 24th November 1946.

Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.
January.			May.			September.		
5	♂ ♀	2 46	7	♂ ♀	6 49	4	♂ ♀	13 5
5	♂ ♀	15 46	16	♂ ♀	19 18	6	♂ ♀	8 48
6	♂ ♀	15 0	24	♂ ♀	1 20	9	♂ ♀	14 17
9	♂ ♀	14 24	30	♂ ♀	7 19	11	♂ ♀	3 5
12	♂ ♀	22 54	30	♂ ♀	9 8	18	♂ ♀	17 52
16	♂ ♀	0 0	31	♂ ♀	0 0	19	♂ ♀	0 14
20	♂ ♀	3 26				19	♂ ♀	7 39
27	♂ ♀	13 30				19	♂ ♀	8 50
29	♂ ♀	15 42				20	♂ ♀	10 59
February.			June.			23	♂ ♀	15 12
15	♂ ♀	22 18	5	♂ ♀	11 0	28	♂ ♀	20 43
16	♂ ♀	21 20	9	♂ ♀	14 11	October.		
19	♂ ♀	12 0	13	♂ ♀	5 3	3	♂ ♀	9 0
21	♂ ♀	3 22	14	♂ ♀	10 0	6	♂ ♀	17 29
24	♂ ♀	5 9	20	♂ ♀	19 30	14	♂ ♀	13 19
26	♂ ♀	4 0	22	♂ ♀	8 27	19	♂ ♀	8 35
			23	♂ ♀	17 43	26	♂ ♀	10 0
			28	♂ ♀	12 55	28	♂ ♀	12 0
March.			July.			November.		
5	♂ ♀	22 32	3	♂ ♀	0 0	14	♂ ♀	0 38
8	♂ ♀	2 8	17	♂ ♀	21 53	15	♂ ♀	8 34
10	♂ ♀	1 40	27	♂ ♀	6 0	17	♂ ♀	1 25
17	♂ ♀	5 8				18	♂ ♀	3 0
17	♂ ♀	8 0				21	♂ ♀	5 50
17	♂ ♀	13 33				23	♂ ♀	6 12
25	♂ ♀	9 0				23	♂ ♀	6 15
29	♂ ♀	11 40				24	♂ ♀	23 12
30	♂ ♀	2 34				27	♂ ♀	16 34
April.			August.			December.		
2	♂ ♀	7 43	7	♂ ♀	0 0	6	♂ ♀	22 41
9	♂ ♀	18 51	7	♂ ♀	5 2	7	♂ ♀	18 37
10	♂ ♀	14 24	10	♂ ♀	21 0	13	♂ ♀	18 0
19	♂ ♀	4 38	11	♂ ♀	8 58	14	♂ ♀	5 27
23	♂ ♀	15 41	16	♂ ♀	20 32	28	♂ ♀	6 28
27	♂ ♀	10 15	26	♂ ♀	13 56	29	♂ ♀	3 0
			29	♂ ♀	5 34	31	♂ ♀	8 29

Timings of Lunar Aspects.

Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.
January.					H. M.			H. M.			H. M.
		H. M.									
1	⊙	1 47	15	⊙	20 26	30	⊙	6 14	12	⊙	11 57
2	⊙	20 33	16	⊙	0 35		⊙	20 5	13	⊙	17 17
3	⊙	2 13	17	⊙	8 23		⊙	3 45	14	⊙	17 40
4	⊙	13 25	18	⊙	11 2		⊙	18 17	15	⊙	21 32
5	⊙	7 45	19	⊙	14 3		⊙	20 30	16	⊙	2 0
6	⊙	1 40	20	⊙	16 48		⊙	21 28	17	⊙	20 45
7	⊙	17 56	21	⊙	13 24		⊙	3 55	18	⊙	5 36
8	⊙	10 4	22	⊙	15 43		⊙	10 34	19	⊙	7 38
9	⊙	21 32	23	⊙	22 20		⊙	14 7	20	⊙	15 16
10	⊙	12 11	24	⊙	10 20		⊙		21	⊙	0 44
11	⊙	13 30	25	⊙	11 56		⊙		22	⊙	3 8
12	⊙	18 7	26	⊙	13 37		⊙		23	⊙	5 45
13	⊙	21 23	27	⊙	19 29		⊙		24	⊙	9 26
14	⊙	18 14	28	⊙	20 17		⊙		25	⊙	1 43
	⊙	21 7	29	⊙	16 25		⊙			⊙	6 23
	⊙	18 14		⊙	1 30		⊙			⊙	9 57
	⊙	19 19		⊙	13 51		⊙			⊙	11 44
	⊙	5 36		⊙	14 26		⊙			⊙	19 40
	⊙	19 34		⊙	22 59		⊙			⊙	9 58
	⊙	2 2		⊙	0 3		⊙			⊙	10 45
	⊙	3 13		⊙	4 57		⊙			⊙	17 2
	⊙	3 32		⊙	21 49		⊙			⊙	18 34
	⊙	4 43		⊙	7 30		⊙			⊙	6 31
	⊙	6 8		⊙	14 8		⊙			⊙	16 5
	⊙	11 40		⊙	19 43		⊙			⊙	17 39
	⊙	17 43		⊙	20 19		⊙			⊙	2 1
	⊙	0 57		⊙	7 50		⊙			⊙	6 48
	⊙	7 10		⊙	12 32		⊙			⊙	11 58
	⊙	7 50		⊙	17 39		⊙			⊙	14 47
	⊙	14 56		⊙	6 39		⊙			⊙	0 55
	⊙	6 22		⊙	16 51		⊙			⊙	2 22
	⊙	15 52		⊙	4 13		⊙			⊙	11 10
	⊙	16 9		⊙	6 4		⊙			⊙	4 5
	⊙	1 52		⊙	8 11		⊙			⊙	13 48
	⊙	4 33		⊙	18 55		⊙			⊙	0 30
	⊙	9 28		⊙	6 30		⊙			⊙	1 54
	⊙	11 54		⊙	10 29		⊙			⊙	10 5
	⊙	0 2		⊙	18 26		⊙			⊙	12 32
	⊙	9 27		⊙	4 53		⊙			⊙	13 55
	⊙	18 36		⊙	14 58		⊙			⊙	22 55
	⊙	23 55		⊙	18 14		⊙			⊙	16 20
	⊙	6 49		⊙	6 30		⊙			⊙	8 5
	⊙	8 24		⊙	30 18		⊙			⊙	14 45
	⊙	10 36		⊙	2 30		⊙			⊙	20 28
	⊙	14 41		⊙	4 55		⊙			⊙	1 27
	⊙	7 52		⊙	6 48		⊙			⊙	2 40
	⊙	11 21		⊙	17 23		⊙			⊙	9 58
				⊙	1 54		⊙			⊙	11 26
						February.					
						1	⊙	20 49			
						2	⊙	2 29			
							⊙	10 12			
							⊙	10 29			
							⊙	11 42			
							⊙	16 56			
							⊙	22 42			
							⊙	12 12			
							⊙	7 52			
							⊙	10 3			
							⊙	16 43			
							⊙	19 33			
							⊙	20 45			
							⊙	21 7			
							⊙	3 11			
							⊙	16 30			
							⊙	11 31			
							⊙	20 13			
							⊙	21 3			
							⊙	23 48			
							⊙	3			
							⊙	5 26			
							⊙	6 22			
							⊙	19 46			
							⊙	23 9			
							⊙	2 12			
							⊙	7 18			
							⊙	9 8			
							⊙	9 58			
							⊙	13 24			
							⊙	22 49			
							⊙	17 26			
							⊙	2 9			
							⊙	4 38			

Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.
		H. M.			H. M.			H. M.			H. M.
26	2	4 37		2	11 21		2	20 55		2	22 0
27	3	1 25		3	15 24	25	3	8 2	7	3	6 27
	4	2 13		4	17 35	26	4	2 2		4	7 3
	5	12 42	11	5	5 26		5	9 16		5	14 3
	6	14 21		6	10 38		6	9 22		6	23 36
	7	16 19	12	7	1 25	27	7	22 0	8	7	5 48
	8	22 8		8	2 50		8	6 14		8	18 34
28	9	26 40		9	11 44		9	8 7	9	9	1 27
	10	14 17		10	16 7		10	9 57		10	1 45
				11	19 32		11	18 56		11	9 42
			13	12	1 59	28	12	18 53		12	12 19
				13	9 42		13	18 54		13	17 56
				14	20 26		14	23 48	10	14	7 52
				15	6 31	29	15	7 14		15	10 34
				16	10 16		16	14 36	11	16	0 11
				17	17 18		17	19 18		17	11 48
				18	22 38		18	22 1		18	7 23
			15	19	1 13	30	19	1 47		19	15 20
				20	12 22		20	14 51		20	20 13
				21	15 13	31	21	0 24	12	21	0 38
				22	6 9		22	0 32		22	17 42
				23	8 45		23	18 51		23	22 11
				24	13 17		24		13	24	8 8
				25	0 36		25			25	15 40
				26	7 2		26			26	23 9
				27	8 39		27			27	0 46
				28	23 3		28			28	6 39
				29	0 56		29			29	11 22
				30	21 52		30			30	2 53
				31	23 54		31			31	14 30
				1	2 25		1	10 50	16	1	18 12
				2	9 47		2	13 0		2	1 59
				3	17 33		3	19 26		3	8 53
				4	18 1		4	2 41		4	16 20
				5	8 32		5	5 25		5	17 10
				6	16 8		6	11 57		6	0 48
				7	21 8		7	13 58		7	6 7
				8	17 7		8	2 54		8	38
				9	20 47		9	14 4		9	14 6
				10	5 34		10	14 26		10	18 15
				11	6 26		11	20 44		11	20 34
				12	20 2		12	4 15		12	9 49
				13	9 58		13	5 24		13	10 0
				14	20 56		14	13 4		14	17 24
				15	21 3		15	16 50		15	2 32
				16	10 14		16	3 28		16	19 14
				17	13 38		17	15 25		17	3 26
				18	18 33		18	18 31		18	4 58

Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.
		H. M.			H. M.			H. M.	June.		
22	♂ ♀	8 22	♂ ♀	11 42	♂ ♀	9 1	H. M.				
	♂ ♀	1 7	♂ ♀	21 41	♂ ♀	13 44					
	♂ ♀	4 22	♂ ♀	2 26	♂ ♀	16 21					
	♂ ♀	10 7	♂ ♀	6 51	♂ ♀	2 45					
23	♂ ♀	15 16	♂ ♀	9 13	♂ ♀	20 22					
	♂ ♀	7 55	♂ ♀	9 34	♂ ♀	10 38					
	♂ ♀	15 52	♂ ♀	7 57	♂ ♀	16 38					
	♂ ♀	20 7	♂ ♀	12 19	♂ ♀	17 7					
24	♂ ♀	23 31	♂ ♀	13 47	♂ ♀	21 6					
	♂ ♀	14 46	♂ ♀	3 56	♂ ♀	2 33					
	♂ ♀	20 33	♂ ♀	2 9	♂ ♀	13 18					
25	♂ ♀	1 57	♂ ♀	10 52	♂ ♀	19 47					
	♂ ♀	2 39	♂ ♀	11 9	♂ ♀	7 41					
	♂ ♀	17 54	♂ ♀	14 18	♂ ♀	23 46					
26	♂ ♀	1 26	♂ ♀	15 34	♂ ♀	3 53					
	♂ ♀	4 41	♂ ♀	16 32	♂ ♀	7 4					
	♂ ♀	14 34	♂ ♀	22 19	♂ ♀	13 3					
27	♂ ♀	0 35	♂ ♀	8 28	♂ ♀	14 11					
	♂ ♀	8 28	♂ ♀	10 45	♂ ♀	4 40					
	♂ ♀	8 56	♂ ♀	15 11	♂ ♀	9 25					
28	♂ ♀	14 32	♂ ♀	16 13	♂ ♀	16 3					
	♂ ♀	0 7	♂ ♀	2 19	♂ ♀	9 31					
	♂ ♀	7 7	♂ ♀	22 19	♂ ♀	11 17					
	♂ ♀	9 21	♂ ♀	1 15	♂ ♀	13 45					
29	♂ ♀	23 49	♂ ♀	11 6	♂ ♀	19 59					
	♂ ♀	6 5	♂ ♀	16 14	♂ ♀	6 21					
	♂ ♀	11 55	♂ ♀	22 37	♂ ♀	15 13					
	♂ ♀	15 13	♂ ♀	22 42	♂ ♀	18 30					
30	♂ ♀	21 53	♂ ♀	0 34	♂ ♀	20 43					
	♂ ♀	2 24	♂ ♀	19 16	♂ ♀	14 53					
	♂ ♀	9 3	♂ ♀	7 25	♂ ♀	15 0					
	♂ ♀	10 31	♂ ♀	13 16	♂ ♀	16 46					
	♂ ♀		♂ ♀	2 44	♂ ♀	23 12					
	♂ ♀		♂ ♀	8 45	♂ ♀	17 9					
	♂ ♀		♂ ♀	11 38	♂ ♀	21 21					
	♂ ♀		♂ ♀	14 42	♂ ♀	22 7					
	♂ ♀		♂ ♀	16 32	♂ ♀	23 29					
	♂ ♀		♂ ♀	18 57	♂ ♀	15 43					
	♂ ♀		♂ ♀	3 41	♂ ♀	17 9					
	♂ ♀		♂ ♀	15 7	♂ ♀	22 7					
	♂ ♀		♂ ♀	20 30	♂ ♀	23 47					
	♂ ♀		♂ ♀	22 36	♂ ♀	21 46					
	♂ ♀		♂ ♀	0 20	♂ ♀	0 0					
	♂ ♀		♂ ♀	8 26	♂ ♀	2 0					
	♂ ♀		♂ ♀	7 36	♂ ♀	15 24					
	♂ ♀		♂ ♀	16 20	♂ ♀	16 31					
	♂ ♀		♂ ♀	19 13	♂ ♀	18 36					
	♂ ♀		♂ ♀	4 19	♂ ♀	23 36					
May.											
1	♂ ♀	4 59									
	♂ ♀	8 0									
	♂ ♀	15 21									
	♂ ♀	18 46									
2	♂ ♀	2 24									
	♂ ♀	2 53									
	♂ ♀	5 5									
	♂ ♀	9 54									
3	♂ ♀	8 50									
	♂ ♀	9 5									

May.

Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.
		H. M.			H. M.			H. M.			H. M.
16	♂ ♀	8 10	♂ ♀	9 45	♂ ♀	20 19					
	♂ ♀	14 52	♂ ♀	11 48	♂ ♀	8 17					
	♂ ♀	14 15	♂ ♀	14 51	♂ ♀	17 24					
17	♂ ♀	1 1	♂ ♀	3 3	♂ ♀	19 54					
	♂ ♀	2 7	♂ ♀	10 5	♂ ♀	7 5					
	♂ ♀	17 9	♂ ♀	19 27	♂ ♀	15 13					
	♂ ♀	14 15	♂ ♀	2 11	♂ ♀	19 23					
	♂ ♀	22 50	♂ ♀	7 56	♂ ♀	19 31					
18	♂ ♀	0 48	♂ ♀	12 46	♂ ♀	0 40					
	♂ ♀	13 6	♂ ♀	21 24	♂ ♀	11 18					
	♂ ♀	11 28	♂ ♀	5 5	♂ ♀	23 6					
	♂ ♀	12 54	♂ ♀	12 46	♂ ♀	0 11					
19	♂ ♀	0 44	♂ ♀	2 10	♂ ♀	8 19					
	♂ ♀	4 47	♂ ♀	3 39	♂ ♀						
	♂ ♀	7 38	♂ ♀	22 57	♂ ♀						
	♂ ♀	11 5	♂ ♀	13 18	♂ ♀						
	♂ ♀	16 7	♂ ♀	3 52	♂ ♀						
	♂ ♀	22 3	♂ ♀	5 8	♂ ♀						
21	♂ ♀	20 48	♂ ♀	16 37	♂ ♀						
	♂ ♀	22 22	♂ ♀	20 15	♂ ♀						
	♂ ♀	2 16	♂ ♀	10 27	♂ ♀						
22	♂ ♀	8 23	♂ ♀	12 46	♂ ♀						
	♂ ♀	18 38	♂ ♀	4 18	♂ ♀						
	♂ ♀	20 3	♂ ♀	7 22	♂ ♀						
23	♂ ♀	3 39	♂ ♀	9 43	♂ ♀						
	♂ ♀	4 5	♂ ♀	10 38	♂ ♀						
	♂ ♀	0 17	♂ ♀	1 22	♂ ♀						
	♂ ♀	1 45	♂ ♀	1 26	♂ ♀						
24	♂ ♀	13 8	♂ ♀	14 38	♂ ♀						
	♂ ♀	1 40	♂ ♀	21 26	♂ ♀						
	♂ ♀	1 52	♂ ♀	14 38	♂ ♀						
	♂ ♀	2 13	♂ ♀	7 13	♂ ♀						
	♂ ♀	7 7	♂ ♀	13 20	♂ ♀						
26	♂ ♀	2 33	♂ ♀	14 8	♂ ♀						
	♂ ♀	4 2	♂ ♀	4 44	♂ ♀						
	♂ ♀	14 51	♂ ♀	7 48	♂ ♀						
	♂ ♀	19 59	♂ ♀	17 10	♂ ♀						
27	♂ ♀	4 42	♂ ♀	4 0	♂ ♀						
	♂ ♀	6 25	♂ ♀	8 6	♂ ♀						
	♂ ♀	8 0	♂ ♀	14 28	♂ ♀						
	♂ ♀	16 10	♂ ♀	15 33	♂ ♀						
28	♂ ♀	2 54	♂ ♀	17 0	♂ ♀						
	♂ ♀	4 31	♂ ♀	6 36	♂ ♀						
	♂ ♀	15 27	♂ ♀	12 38	♂ ♀						
	♂ ♀	1 40	♂ ♀	18 27	♂ ♀						
	♂ ♀	6 42	♂ ♀	7 35	♂ ♀						
	♂ ♀	8 5	♂ ♀	9 14	♂ ♀						
	♂ ♀	9 37	♂ ♀	15 44	♂ ♀						
	♂ ♀	20 22	♂ ♀	17 3	♂ ♀						

August.

Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.
		H. M.			H. M.			H. M.			H. M.
10	☉	13 46	25	☽	7 45	7	☉	23 58	21	☽	23 8
	☽	20 6		☉	19 29		☽	6 50		☉	4 58
11	☽	23 8		☽	22 47	8	☽	16 23		☽	10 38
	☽	17 1		☽	6 0		☽	0 42		☽	14 30
	☽	17 9		☽	10 58		☽	7 34		☽	0 20
12	☽	19 33		☽	19 52		☽	13 27		☽	14 40
	☽	0 11		☽	0 6		☽	16 40		☽	4 16
13	☽	3 31		☽	6 27		☽	4 52		☽	4 36
	☽	3 56		☽	11 34		☽	12 29		☽	4 39
	☽	6 23		☽	2 36		☽	15 58		☽	15 41
14	☽	8 52		☽	2 40		☽	15 58		☽	16 51
	☽	1 43		☽	9 47		☽	12 58		☽	19 27
	☽	4 12		☽	17 25		☽	15 36		☽	8 59
	☽	8 27		☽	5 12		☽	20 53		☽	20 12
	☽	8 43		☽	6 47		☽	8 54		☽	11 8
15	☽	11 22		☽	11 11		☽	15 28		☽	11 56
	☽	14 45		☽	17 7		☽	21 12		☽	14 17
	☽	13 5		☽	3 56		☽	21 50		☽	22 34
16	☽	15 55		☽	8 48		☽	7 44		☽	2 13
	☽	12 6		☽	12 36		☽	19 51		☽	8 10
	☽	12 37		☽	2 43		☽	20 32		☽	20 2
	☽	15 10		☽	18 50		☽	21 27		☽	3 59
	☽	16 59		☽	20 55		☽	21 3		☽	20 36
17	☽	18 53		☽	21 5		☽	23 7		☽	22 44
	☽	17 58		☽	1 53		☽	1 28		☽	3 40
	☽	21 14		☽	18 16		☽	3 26		☽	8 8
	☽	23 26		☽			☽	11 51		☽	11 44
18	☽	22 52		☽			☽	0 14		☽	2 17
	☽	19 18		☽			☽	4 38		☽	2 34
	☽	21 14		☽			☽	4 41		☽	10 14
19	☽	3 19		☽			☽	4 17		☽	9 4
	☽	21 44		☽			☽	5 37		☽	14 55
	☽	1 23		☽			☽	7 29		☽	20 21
	☽	6 48		☽			☽	8 36		☽	20 55
	☽	16 37		☽			☽	15 15		☽	23 52
21	☽	0 31		☽			☽	3 16		☽	
	☽	0 57		☽			☽	7 26		☽	
	☽	3 44		☽			☽	10 33		☽	
22	☽	10 35		☽			☽	12 16		☽	
	☽	0 46		☽			☽	15 59		☽	
	☽	4 47		☽			☽	17 55		☽	
	☽	13 14		☽			☽	18 55		☽	
23	☽	19 46		☽			☽	6 39		☽	
	☽	3 18		☽			☽	10 39		☽	
	☽	5 59		☽			☽	17 5		☽	
	☽	10 33		☽			☽	10 31		☽	
	☽	17 12		☽			☽	19 19		☽	
24	☽	3 25		☽			☽	20 1		☽	

September.

October.

Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.	Date.	Aspect	Time.
		H. M.			H. M.			H. M.			H. M.
19	☽	10 35	2	☽	7 56	16	☽	5 17		☽	5 17
	☽	11 46		☽	8 57		☽	7 3		☽	7 3
6	☽	20 4		☽	10 6		☽	0 23		☽	0 23
	☽	3 48		☽	11 5		☽	0 4		☽	0 4
7	☽	13 32		☽	9 28		☽	0 9		☽	0 9
	☽	20 44		☽	22 2		☽	0 1		☽	0 1
	☽	1 37		☽	4 54		☽	0 6		☽	0 6
8	☽	3 31		☽	10 13		☽	8 3		☽	8 3
	☽	21 2		☽	17 52		☽	10 36		☽	10 36
	☽	22 44		☽	17 56		☽	13 13		☽	13 13
9	☽	15 3		☽	19 39		☽	6 27		☽	6 27
	☽	21 40		☽	23 34		☽	12 52		☽	12 52
10	☽	5 2		☽	16 28		☽	15 11		☽	15 11
	☽	9 24		☽	7 6		☽	4 21		☽	4 21
	☽	11 13		☽	9 28		☽	16 36		☽	16 36
11	☽	8 31		☽	18 4		☽	17 18		☽	17 18
	☽	10 50		☽	22 50		☽	18 44		☽	18 44
	☽	13 29		☽	23 28		☽	22 20		☽	22 20
12	☽	5 4		☽	0 23		☽	15 15		☽	15 15
	☽	7 44		☽	7 55		☽	19 30		☽	19 30
	☽	14 40		☽	19 38		☽	5 42		☽	5 42
13	☽	19 22		☽	10 21		☽	10 21		☽	10 21
	☽	21 13		☽	12 7		☽	3 1		☽	3 1
	☽	21 28		☽	21 27		☽	5 22		☽	5 22
14	☽	22 51		☽	0 30		☽	7 30		☽	7 30
	☽	7 0		☽	1 46		☽	10 5		☽	10 5
	☽	19 36		☽	12 38		☽	2 18		☽	2 18
15	☽	21 54		☽	12 3		☽	3 45		☽	3 45
	☽	4 35		☽	20 16		☽	13 15		☽	13 15
16	☽	7 32		☽	9 15		☽	22 53		☽	22 53
	☽	9 21		☽	14 50		☽	15 9		☽	15 9
17	☽	9 56		☽	22 24		☽	17 42		☽	17 42
	☽	15 22		☽	2 22		☽	23 43		☽	23 43
18	☽	2 11		☽	2 33		☽	14 43		☽	14 43
	☽	8 18		☽	16 8		☽	14 48		☽	14 48
	☽	16 33		☽	21 49		☽	21 47		☽	21 47
19	☽	18 46		☽	7 49		☽	17 26		☽	17 26
	☽	20 41		☽	22 24		☽	4 12		☽	4 12
20	☽	22 34		☽	1 8		☽	6 54		☽	6 54
	☽	22 41		☽	2 47		☽	16 53		☽	16 53
21	☽	15 40		☽	3 50		☽	1 13		☽	1 13
	☽	18 58		☽	20 39		☽	3 36		☽	3 36
22	☽	7 12		☽	22 7		☽	11 49		☽	11 49
	☽	14 31		☽	22 13		☽	16 33		☽	16 33
	☽	19 51		☽	22 37		☽	19 26		☽	19 26
23	☽	21 46		☽	3 30		☽	2 59		☽	2 59

November.

Date.	Aspect	Time.	Date.	Aspect	Time.	Date	Aspect	Time.	Date.	Aspect	Time.	
		H. M.			H. M.			H. M.			H. M.	
♈	*	8 51	7	♈	22 42	14	♈	□	23	♈	21 46	
♈	□	10 53		♈	22 42		♈	□	24	♈	18 36	
♈	Δ	15 6		♈	1 23	15	♈	□		♈	8 26	
♈	□	16 52		♈	5 58		♈	□	25	♈	13 6	
December.				♈	10 30		♈	*		♈	14 4	
				♈	12 25		♈	*	7 40	25	♈	1 17
				♈	11 37		♈	□	10 30		♈	7 5
				♈	14 32		♈	□	3 36		♈	7 17
				♈	22 28		♈	*	13 29	26	♈	13 17
				♈	23 9		♈	*	21 13		♈	12 48
				♈	1 3		♈	*	1 37	27	♈	18 48
				♈	5 26		♈	□	15 10		♈	20 24
				♈	11 40		♈	□	17 10		♈	2 23
				♈	14 58		♈	Δ	20 45	28	♈	18 58
2	♈	π	2	37	10	♈	Δ	6 22	29	♈	19 51	
	♈	π	3	13		♈	*	16 49		♈	21 20	
	♈	π	5	32		♈	*	7 0	30	♈	4 11	
	♈	Δ	13	29		♈	□	7 23		♈	5 0	
	♈	Δ	19	24		♈	□	12 22	31	♈	6 48	
	♈	Δ	21	33		♈	□	3 20		♈	9 20	
	♈	□	23	49		♈	□	5 58		♈	12 53	
3	♈	Δ	2	4		♈	□	6 24		♈	4 30	
4	♈	Δ	8	58		♈	□	23 46		♈	6 25	
	♈	Δ	11	54		♈	□	9 2		♈	14 35	
	♈	Δ	13	50		♈	□	19 43		♈	16 32	
	♈	Δ	19	57		♈	□	0 59		♈	14 35	
5	♈	*	4	34		♈	□	3 35		♈	17 49	
	♈	Δ	5	35		♈	□	17 11		♈	20 21	
	♈	Δ	8	34		♈	□	18 38		♈	20 37	
6	♈	Δ	11	33		♈	□			♈		
	♈	π	14	27		♈	□			♈		
	♈	π	20	3		♈	□			♈		

Note.—The position of ♈'s and ♉'s ascending node on any day during one century (1890 to 1990 A. D.) can be found very accurately from this table. The figures under "difference" column indicate the change in ♈'s longitude in 50 years. This is positive for years in advance of and negative for years previous to 1940. (For details see EXPLANATIONS)

Sun's long.	Mercury		Mars.		Sun's long.	Mercury		Mars.						
	♌	Diff.	♌	Diff.		♌	Diff.	♌	Diff.					
♈ 0	10	♈ 52	5	29	♈ 36	17	10	11	♈ 49	7	15	♈ 25	15	
1	11	43	"	"	59	"	11	12	35	"	15	49	"	
2	12	27	"	"	08	22	18	12	13	20	"	16	14	"
3	13	15	"	"	45	"	"	13	14	6	"	16	38	"
4	14	2	"	"	1	8	19	14	14	52	"	17	2	14
5	14	49	"	"	31	"	"	15	15	37	"	17	27	"
6	15	36	"	"	54	20	"	16	16	23	8	18	51	"
7	16	23	"	"	2	20	19	17	17	9	"	18	16	"
8	17	11	"	"	38	"	"	18	17	55	"	19	40	"
9	17	58	"	"	3	4	18	19	18	40	"	19	4	"
10	18	44	6	"	28	17	"	20	19	26	9	20	29	"
11	19	31	"	"	51	"	"	21	20	12	"	20	53	"
12	20	18	"	"	4	14	"	22	20	58	"	20	18	"
13	21	4	"	"	38	"	"	23	21	43	"	21	42	"
14	21	51	"	"	5	1	"	24	22	30	9	21	7	"
15	22	38	"	"	25	"	"	25	23	15	"	22	31	"
16	23	24	"	"	49	"	"	26	24	1	"	22	55	"
17	24	10	"	"	6	12	"	27	24	46	"	23	20	"
18	24	57	"	"	36	"	"	28	25	33	"	23	44	"
19	25	43	"	"	59	"	"	29	26	19	"	24	9	13
20	26	29	"	"	7	24	"	♈ 0	27	5	10	24	33	"
21	27	15	"	"	47	"	"	1	27	51	"	25	57	"
22	28	2	"	"	8	11	"	2	28	37	"	26	22	"
23	28	48	"	"	35	16	"	3	29	22	"	27	46	"
24	29	34	"	"	59	"	"	4	0	♈ 9	"	28	11	"
25	0	20	"	"	9	23	"	5	0	55	"	29	35	"
26	1	6	"	"	47	"	"	6	1	41	"	30	59	"
27	1	52	"	"	10	11	"	7	2	27	"	31	24	"
28	2	37	"	"	35	"	"	8	3	13	"	32	48	"
29	3	24	"	"	59	"	"	9	3	59	"	33	13	"
♈ 0	4	10	7	"	11	23	"	10	4	46	"	34	37	"
1	4	56	"	"	47	"	"	11	5	31	"	35	1	"
2	5	42	"	"	12	11	"	12	6	19	"	36	26	12
3	6	27	"	"	35	"	"	13	7	5	"	37	50	"
4	7	13	"	"	13	0	15	14	7	51	"	38	14	"
5	7	59	"	"	24	"	"	15	8	38	"	39	39	"
6	8	45	"	"	48	"	"	16	9	24	"	0 ♈	3	"
7	9	31	"	"	14	12	"	17	10	11	"	41	27	"
8	10	17	"	"	37	"	"	18	10	57	"	42	51	"
9	11	3	"	"	15	0	"	19	11	44	"	1	15	"

46 Geocentric long of ascending nodes of ♄ and ♃ in 1940.—Contd.

Sun's long.	Mercury		Mars.		Sun's long.	Mercury		Mars.	
	♄	Diff.	♄	Diff.		♄	Diff.	♄	Diff.
♄ 20	12	♄ 31	10	1	♄ 11	24	♄ 27	9	20
21	13	18	"	2	12	25	21	"	21
22	14	5	"	27	13	26	14	"	39
23	14	52	"	52	14	27	8	"	59
24	15	39	"	3	15	28	2	"	18
25	16	26	"	40	16	28	57	"	39
26	17	13	"	4	17	29	50	"	58
27	18	0	"	28	18	0	♄ 44	"	23
28	18	48	"	4	19	1	39	"	36
29	19	35	"	5	20	2	34	"	55
♄ 0	20	22	11	6	21	3	30	"	24
1	21	10	"	6	22	4	25	"	33
2	21	58	"	7	23	5	21	"	51
3	22	45	"	8	24	6	17	"	9
4	23	33	"	8	25	7	13	"	27
5	24	21	"	8	26	8	8	"	45
6	25	9	"	9	27	9	5	"	2
7	25	57	"	9	28	10	1	"	19
8	26	45	"	10	29	10	59	"	16
9	27	33	"	10	0	11	57	"	53
10	28	22	10	10	1	12	56	"	27
11	29	10	"	10	2	13	55	"	25
12	29	59	"	11	3	14	54	"	41
13	0	♄ 47	"	11	4	15	53	"	56
14	1	36	"	12	5	16	52	"	28
15	2	25	"	12	6	17	52	"	26
16	3	14	"	13	7	18	52	"	41
17	4	3	"	13	8	19	52	"	55
18	4	53	"	14	9	20	53	"	9
19	5	43	"	14	10	21	54	"	22
20	6	32	"	15	11	22	55	"	35
21	7	21	"	15	12	23	57	"	48
22	8	11	"	16	13	24	59	"	0
23	9	1	"	16	14	26	3	"	12
24	9	51	"	17	15	27	5	"	23
25	10	41	9	17	16	28	8	"	33
26	11	32	"	18	17	29	12	"	45
27	12	22	"	18	18	0	♄ 16	"	53
28	13	13	"	19	19	1	20	"	3
29	14	4	"	19	20	2	25	"	11
♄ 0	14	55	"	20	21	3	30	"	19
1	15	46	"	20	22	4	36	"	27
2	16	37	"	21	23	5	43	"	34
3	17	29	"	21	24	6	50	"	40
4	18	21	"	22	25	7	57	"	45
5	19	12	"	23	26	9	4	"	50
6	20	4	"	24	27	10	12	"	54
7	0	57	"	25	28	11	21	"	57
8	21	49	"	26	29	12	29	"	0
9	22	42	"	27	0	13	39	"	1
10	23	34	"	28	1	14	48	"	2

Geocentric long. of ascending nodes of ♄ and ♃ in 1940.—Contd. 47

Sun's long.	Mercury		Mars.		Sun's long.	Mercury		Mars.	
	♄	Diff.	♄	Diff.		♄	Diff.	♄	Diff.
♄ 2	16	0	1	2	♄ 23	25	♄ 30	16	11
3	17	11	"	2	24	26	57	"	9
4	18	22	"	1	25	28	25	"	7
5	19	34	"	58	26	29	52	"	5
6	20	46	"	54	27	1	19	"	3
7	22	0	2	49	28	2	46	"	2
8	23	13	"	36	29	4	12	"	0
9	24	26	"	28	♄ 0	5	39	17	28
10	25	41	3	17	1	7	5	"	27
11	26	57	"	6	2	8	32	"	25
12	28	11	"	0	3	9	57	"	24
13	29	27	4	37	4	11	24	"	23
14	0	♄ 44	"	21	5	12	47	"	21
15	2	0	5	0	6	14	12	"	20
16	3	18	"	29	7	15	36	"	19
17	4	36	"	21	8	16	59	"	18
18	5	54	6	28	9	18	22	"	17
19	7	13	"	30	10	19	46	"	16
20	8	33	7	1	11	21	8	"	15
21	9	52	"	27	12	22	30	"	14
22	11	13	"	26	13	23	52	"	14
23	12	34	"	18	14	25	15	18	13
24	13	57	8	25	15	26	34	"	12
25	15	17	"	24	16	27	54	17	12
26	16	39	9	11	17	29	14	"	11
27	18	2	"	23	18	0	♄ 35	"	10
28	19	25	10	22	19	1	52	"	8
29	20	49	11	21	20	3	10	16	9
♄ 0	22	15	12	20	21	4	29	14	9
1	23	37	"	19	22	5	45	"	8
2	25	1	"	18	23	7	2	"	13
3	26	27	"	17	24	8	18	"	55
4	27	52	"	15	25	9	34	"	39
5	29	17	13	14	26	10	49	"	25
6	0	♄ 43	"	13	27	12	4	"	11
7	2	10	"	11	28	13	18	"	0
8	3	36	"	10	29	14	31	"	7
9	5	3	"	8	0	15	44	13	42
10	6	29	14	6	1	16	57	"	34
11	7	57	"	5	2	18	9	"	28
12	9	24	"	3	3	19	21	"	23
13	10	52	"	1	4	20	32	"	19
14	12	19	"	29	5	21	42	"	16
15	13	47	15	27	6	22	52	12	15
16	15	15	"	25	7	24	2	"	15
17	16	43	"	23	8	25	11	"	15
18	18	11	"	21	9	26	19	"	16
19	19	39	"	19	10	27	27	11	19
20	21	6	16	17	11	28	35	"	21
21	22	34	"	15	12	29	42	"	24
22	24	2	"	13	13	0	♄ 49	"	29

48 Geocentric long. of ascending nodes of ♄ and ♂ in 1940.—concl'd.

Sun's long.	Mercury		Mars.		Sun's long.	Mercury		Mars.	
	♄	Diff.	♄	Diff.		♄	Diff.	♄	Diff.
14	1	55	11	7	22	9	13	4	16
15	3	1	7	40	23	10	6	31	12
16	4	7	10	46	24	10	59	3	31
17	5	11	53	34	25	11	52	17	9
18	6	15	8	0	26	12	44	2	28
19	7	19	9	9	27	13	37	1	48
20	8	23	18	33	28	14	29	18	8
21	9	26	27	32	29	15	21	28	8
22	10	29	37	32	30	16	12	47	8
23	11	31	47	31	1	17	4	19	8
24	12	33	57	31	2	17	55	28	22
25	13	35	9	20	3	18	46	48	9
26	14	36	20	31	4	19	37	20	9
27	15	37	32	30	5	20	28	29	9
28	16	37	45	30	6	21	19	50	9
29	17	37	58	29	7	22	9	21	9
0	18	37	11	24	8	22	59	32	21
1	19	36	24	38	9	23	50	53	14
2	20	35	38	52	10	24	40	22	14
3	21	34	7	22	11	25	29	35	18
4	22	33	22	13	12	26	19	57	20
5	23	31	37	15	13	27	9	23	1
6	24	28	52	8	14	27	58	40	1
7	25	26	24	40	15	28	47	24	1
8	26	23	56	13	16	29	36	24	1
9	27	19	13	30	17	0	25	45	1
10	28	16	30	47	18	1	14	25	7
11	29	12	47	20	19	2	3	29	13
12	0	8	30	22	20	2	52	51	19
13	1	3	47	24	21	3	40	35	19
14	1	59	5	25	22	4	29	58	20
15	2	54	22	26	23	5	17	27	20
16	3	49	40	25	24	6	5	43	18
17	4	44	58	16	25	6	54	28	18
18	5	38	15	34	26	7	42	51	18
19	6	32	53	24	27	8	29	29	13
20	7	26	29	10	28	9	17	29	13
21	8	19	24	29	29	10	5	29	13

Table showing the Position of M. C. corresponding to a given sidereal time. 49

Sid. Time.		M. C.		Sid. Time.		M. C.		Sid. Time.		M. C.		Sid. Time.		M. C.	
H.	M.	°		H.	M.	°		H.	M.	°		H.	M.	°	
0	0	0	7	0	6	0	0	0	12	0	0	0	18	0	0
	15	4	5		15	3	26		15	4	5		15	3	26
	30	8	10		30	6	53		30	8	10		30	6	53
	45	12	14		45	10	20		45	12	14		45	10	20
1	0	16	17	7	0	13	48	13	0	16	17	19	0	13	48
	15	20	18		15	17	18		15	20	18		15	17	18
	30	24	18		30	20	48		30	24	18		30	20	48
	45	28	16		45	24	20		45	28	16		45	24	20
2	0	2	8	11	8	0	27	54	14	0	2	11	20	0	27
	15	6	4		15	1	30		15	6	4		15	1	30
	30	9	54		30	5	9		30	9	54		30	5	9
	45	13	42		45	8	49		45	13	42		45	8	49
3	0	17	28	9	0	12	32	15	0	17	28	21	0	12	32
	15	21	11		15	16	17		15	21	11		15	16	17
	30	24	51		30	20	5		30	24	51		30	20	5
	45	28	29		45	23	56		45	28	29		45	23	56
4	0	2	11	5	10	0	27	49	16	0	2	5	22	0	27
	15	5	39		15	1	44		15	5	39		15	1	44
	30	9	11		30	5	42		30	9	11		30	5	42
	45	12	42		45	9	42		45	12	42		45	9	42
5	0	16	12	11	0	13	43	17	0	16	12	23	0	13	43
	15	19	39		15	17	46		15	19	39		15	17	46
	30	23	7		30	21	50		30	23	7		30	21	50
	45	26	33		45	25	55		45	26	33		45	25	55

Table of Ascendants for Latitudes 7° to 20°.

50

Sid. Time.	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°
H. M.	°	°	°	°	°	°	°	°	°	°	°	°	°	°
0	0 92	48 93	12 93	34 94	0 94	25 94	50 95	15 95	40 96	5 96	30 96	56 97	22 97	47 98
15	96 13	96 37	97 97	1 97	25 97	50 98	14 98	39 99	3 99	28 99	53 100	18 100	44 101	10 101
30	99 39	100 31	100 31	27 100	50 101	14 101	38 102	27 102	27 102	51 103	15 103	40 104	5 104	31 104
45	102 3	103 3	103 52	104 52	104 39	105 39	105 39	105 39	105 39	106 39	107 39	107 39	107 39	107 39
1	0 106	31 106	54 107	16 107	40 108	3 108	26 108	49 109	13 109	36 110	0 110	23 110	47 111	11 111
15	109 58	110 20	110 42	11 51	11 28	11 51	11 28	11 51	11 28	11 51	11 28	11 51	11 28	11 51
30	113 24	113 47	114 9	114 9	114 53	115 53	115 53	115 53	115 53	116 53	117 53	117 53	117 53	117 53
45	116 54	117 14	117 36	117 36	118 58	118 58	118 58	118 58	118 58	119 58	120 58	120 58	120 58	120 58
2	0 120	23 120	44 121	4 121	25 121	45 122	7 122	34 123	53 123	13 123	38 123	53 123	13 123	38 123
15	123 53	124 14	124 34	124 34	125 53	125 53	125 53	125 53	125 53	126 53	127 53	127 53	127 53	127 53
30	127 26	127 45	128 4	128 4	128 24	128 42	129 1	129 24	129 39	129 58	130 17	130 37	130 56	131 34
45	131 1	131 18	131 37	131 37	132 56	132 56	132 56	132 56	132 56	133 56	134 56	134 56	134 56	134 56
3	0 134	37 134	54 135	12 135	29 135	45 136	2 136	19 136	36 136	53 137	0 137	26 137	43 138	0 138
15	138 14	138 34	138 54	139 1	139 13	139 35	139 58	140 1	140 24	140 47	140 70	140 93	140 116	140 139
30	141 53	142 10	142 25	142 40	142 55	143 10	143 25	143 40	143 55	144 10	144 25	144 40	144 55	144 70
45	145 36	145 50	146 4	146 19	146 33	146 48	146 63	146 78	146 93	147 7	147 22	147 47	147 72	147 97
4	0 149	20 149	33 149	45 149	59 150	10 150	22 150	35 150	47 150	59 151	11 151	23 151	35 151	47 151
15	153 6	153 17	153 37	153 57	154 10	154 30	154 50	154 70	154 90	154 110	154 130	154 150	154 170	154 190
30	156 54	157 3	157 22	157 42	157 62	157 82	157 102	157 122	157 142	157 162	157 182	157 202	157 222	157 242
45	160 41	160 51	161 11	161 31	161 51	161 71	161 91	161 111	161 131	161 151	161 171	161 191	161 211	161 231
5	0 164	33 164	51 164	45 164	51 164	58 165	4 165	11 165	17 165	23 165	30 165	36 165	42 165	49 165
15	168 22	168 38	168 54	168 69	168 85	168 101	168 117	168 133	168 149	168 165	168 181	168 197	168 213	168 229
30	172 16	172 32	172 48	172 64	172 80	172 96	172 112	172 128	172 144	172 160	172 176	172 192	172 208	172 224
45	176 6	176 22	176 38	176 54	176 70	176 86	176 102	176 118	176 134	176 150	176 166	176 182	176 198	176 214
6	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180

Table of Ascendants for Latitudes 7° to 20°.

51

Sid. Time.	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°
H. M.	°	°	°	°	°	°	°	°	°	°	°	°	°	°
6	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180
15	183 53	183 51	183 49	183 48	183 46	183 45	183 42	183 42	183 41	183 40	183 38	183 36	183 33	183 32
30	187 45	187 41	187 39	187 36	187 32	187 29	187 25	187 23	187 20	187 17	187 13	187 9	187 6	187 3
45	191 36	191 32	191 27	191 22	191 17	191 13	191 8	191 4	190 58	190 53	190 49	190 44	190 40	190 35
7	0 195	27 195	22 195	15 195	9 195	2 194	56 194	49 194	43 194	37 194	30 194	24 194	18 194	11 194
15	199 19	199 10	199 1	198 52	198 46	198 37	198 28	198 19	198 10	198 1	197 51	197 44	197 37	197 30
30	203 7	202 57	202 48	202 38	202 28	202 19	202 9	202 0	201 51	201 41	201 32	201 23	201 14	201 5
45	206 55	206 43	206 31	206 18	206 5	205 52	205 38	205 25	205 12	204 59	204 45	204 32	204 19	204 5
8	0 210	40 210	27 210	15 210	1 209	50 209	38 209	25 209	13 209	1 208	49 208	37 208	25 208	14 208
15	214 24	214 10	213 56	213 41	213 26	213 11	212 56	212 41	212 26	212 11	211 56	211 41	211 26	211 11
30	218 42	217 50	217 36	217 22	217 7	216 52	216 38	216 24	216 10	215 56	215 42	215 28	215 14	214 58
45	221 46	221 30	221 13	220 56	220 40	220 24	220 8	220 2	219 46	219 30	219 14	218 58	218 42	218 26
9	0 225	22 225	6 224	49 224	31 224	13 223	58 223	41 223	24 223	7 222	34 222	17 222	0 222	14 221
15	229 0	228 42	228 23	228 4	227 47	227 28	227 9	226 50	226 31	226 12	225 53	225 34	225 15	224 56
30	232 34	232 15	231 56	231 36	231 18	230 59	230 40	230 21	230 2	229 43	229 24	229 5	228 46	228 27
45	236 6	235 46	235 26	235 6	234 46	234 26	234 7	233 47	233 27	233 7	232 47	232 27	232 7	231 47
10	0 239	37 239	17 238	56 238	35 238	14 237	53 237	33 237	13 236	51 236	31 236	10 235	49 235	29 235
15	243 7	242 46	242 24	242 2	241 41	241 20	240 58	240 37	240 15	239 54	239 33	239 11	238 49	238 28
30	246 36	246 13	245 51	245 28	245 5	244 42	244 19	243 56	243 33	243 10	242 47	242 24	242 1	241 46
45	250 22	249 40	249 18	248 55	248 32	248 9	247 47	247 24	247 1	246 38	246 15	245 52	245 29	244 6
11	0 253	29 253	7 252	44 252	20 251	5 251	34 251	11 250	4 250	24 250	3 250	22 250	33 250	44 250
15	256 56	256 32	256 8	255 45	255 22	254 59	254 36	254 13	253 50	253 27	253 4	252 41	251 58	251 35
30	260 21	259 57	259 33	259 8	258 45	258 22	257 59	257 36	257 13	256 50	256 27	255 44	255 21	254 58
45	263 47	263 23	262 59	262 35	262 10	261 46	261 21	260 57	260 32	260 7	259 42	259 17	258 52	258 27
12	0 267	13 266	48 266	23 266	0 265	38 265	10 264	45 264	20 263	55 263	30 263	4 262	38 262	13 261

Table of Ascendants for Latitudes 7° to 20°.

52

Sid. Time.	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°
H. M.	°	°	°	°	°	°	°	°	°	°	°	°	°	°
12 0	267	13 266	48 266	23 266	0 265	35 265	10 264	45 264	20 263	55 263	37 263	4 262	38 262	13 261
15 0	270	38 270	14 269	49 269	25 269	0 268	35 268	10 267	44 267	19 266	53 266	27 266	1 265	34 265
30 0	274	4 273	41 273	17 272	51 272	27 272	2 271	36 271	11 270	47 270	21 269	55 269	27 269	0 268
45 0	277	34 277	9 276	44 276	23 275	55 275	30 275	4 274	39 274	13 273	47 273	21 272	54 272	27 271
13 0	281	3 280	38 280	14 279	50 279	25 279	0 278	35 278	9 277	43 277	17 276	51 276	24 275	57 275
15 0	284	34 284	10 283	45 283	21 282	56 282	31 282	6 281	41 281	15 280	48 280	22 279	55 279	28 279
30 0	288	8 287	44 287	19 286	55 286	30 286	6 285	41 285	15 284	50 284	24 283	58 283	30 283	3 282
45 0	291	41 291	19 290	55 290	32 290	7 289	43 289	18 288	53 288	27 288	0 287	35 287	8 286	41 286
14 0	295	19 294	56 294	33 294	11 293	46 293	22 292	58 292	34 292	8 291	42 291	17 290	50 290	23 289
15 0	299	0 298	38 298	15 297	52 297	28 297	5 296	41 296	16 295	52 295	27 295	2 294	35 294	9 293
30 0	302	43 302	21 301	59 301	37 301	14 300	51 300	28 300	4 299	40 299	15 298	50 298	25 297	59 297
45 0	306	29 306	8 305	46 305	27 305	3 304	41 304	18 303	55 303	32 303	8 302	44 302	19 301	54 301
15 0	310	17 309	59 309	38 309	17 308	56 308	35 308	13 307	51 307	28 307	5 306	41 306	17 305	52 305
15 0	314	11 313	52 313	32 313	12 312	52 312	32 312	12 311	51 311	30 311	6 310	45 310	22 309	58 309
30 0	318	7 317	50 317	32 317	12 316	55 316	34 316	15 315	55 315	35 315	14 314	53 314	31 314	9 313
45 0	322	6 321	50 321	32 321	18 320	58 320	51 320	34 320	17 320	48 320	25 319	53 318	45 318	3 317
16 0	326	11 325	55 325	39 325	24 325	7 324	51 324	34 324	17 324	48 324	25 323	53 322	45 322	25 321
15 0	330	14 330	2 329	48 329	33 329	20 328	53 328	49 328	34 328	18 328	46 327	29 327	10 326	52 326
30 0	334	25 334	11 333	47 333	35 333	22 333	6 332	48 332	34 332	18 332	46 331	29 331	10 330	52 330
45 0	338	37 338	25 338	15 338	5 337	54 337	42 337	31 337	19 337	8 336	56 336	43 336	30 336	17 336
17 0	342	37 342	41 342	33 342	25 342	15 342	6 341	58 341	48 341	38 341	28 341	17 341	7 340	56 340
15 0	347	5 346	58 346	52 346	47 346	39 346	33 346	25 346	18 346	11 346	3 345	55 345	47 345	39 345
30 0	351	22 351	18 351	15 351	11 351	6 351	1 350	56 350	51 350	46 350	41 350	36 350	30 350	25 350
45 0	355	42 355	40 355	38 355	34 355	31 355	29 355	26 355	23 355	20 355	17 355	15 355	13 355	9 355
18 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table of Ascendants for Latitudes 7° to 20°.

53

Sid. Time.	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	20°
H. M.	°	°	°	°	°	°	°	°	°	°	°	°	°	°
18 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15 0	4	19	4	23	4	8	4	34	4	37	4	43	4	47
30 0	8	37	8	46	8	13	8	49	8	14	9	24	9	35
45 0	12	56	13	2	13	17	13	35	13	18	14	5	14	21
19 0	17	14	17	19	17	22	18	22	18	22	18	43	18	53
15 0	21	27	21	25	21	26	22	29	22	23	23	17	23	30
30 0	25	35	25	28	25	30	26	33	26	31	27	27	30	38
45 0	29	46	29	32	29	34	30	37	30	35	32	32	35	43
20 0	33	51	34	38	33	38	34	41	37	42	38	36	37	45
15 0	37	54	38	42	37	42	38	45	41	46	42	40	41	49
30 0	41	58	42	46	41	46	42	49	45	50	46	44	45	53
45 0	45	62	46	50	45	50	46	53	49	54	50	48	49	57
21 0	49	66	50	54	49	54	50	57	53	58	54	52	53	61
15 0	53	70	53	58	53	58	54	61	57	62	58	56	57	65
30 0	57	74	57	62	57	62	58	65	61	66	62	60	61	69
45 0	61	78	61	66	61	66	62	69	65	70	66	64	65	73
22 0	65	82	65	70	65	70	66	73	69	74	70	68	69	77
15 0	69	86	69	74	69	74	70	77	73	78	74	72	73	81
30 0	73	90	73	78	73	78	74	81	77	82	78	76	77	85
45 0	77	94	77	82	77	82	78	85	81	86	82	80	81	89
23 0	81	98	81	86	81	86	82	89	85	90	86	84	85	93
15 0	85	102	85	90	85	90	86	93	89	94	90	88	89	97
30 0	89	106	89	94	89	94	90	97	93	98	94	92	93	101
45 0	93	110	93	98	93	98	94	101	97	102	98	96	97	105
24 0	97	114	97	102	97	102	98	105	101	106	102	100	101	109

Table of Ascendants for Latitudes 21° to 34°.

Lat.	21°	22°	23°	24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°
H. M.	°	°	°	°	°	°	°	°	°	°	°	°	°	°
0	0 98	41 09	8 99	35 100	3 100	31 100	59 101	27 101	56 102	34 102	57 103	26 103	57 104	29 105
15	102	2 102	28 102	55 103	22 103	49 104	17 104	45 105	18 105	43 106	12 106	41 107	11 107	42 108
30	105	22 105	48 106	14 106	40 107	7 107	33 108	2 108	29 108	58 109	26 109	54 110	24 110	53 111
45	108	42 109	7 109	57 110	23 110	49 111	16 111	43 112	11 112	38 113	6 113	34 114	2 114	31
1	0 112	0 112	24 112	49 113	14 113	39 114	5 114	31 114	56 115	22 115	49 116	16 116	43 117	10 117
15	115	18 115	42 116	16 116	30 116	54 117	19 117	44 118	9 118	34 119	0 119	25 119	50 120	18 120
30	118	39 119	0 119	23 119	46 120	10 120	33 120	57 121	21 121	46 122	11 122	35 123	0 123	25 123
45	121	54 122	17 122	38 123	2 123	24 123	47 124	9 124	32 124	58 125	21 125	44 126	8 126	32 126
2	0 125	14 125	35 125	57 126	18 126	39 127	1 127	23 127	45 128	8 128	31 128	54 129	17 129	37 130
15	128	3 128	53 129	14 129	34 129	54 130	15 130	36 130	57 131	19 131	40 132	2 132	24 132	45 133
30	131	54 132	13 132	35 133	5 133	11 133	30 133	50 134	9 134	29 134	50 135	11 135	3 135	51 136
45	135	15 135	32 135	50 136	7 136	26 136	44 137	3 137	22 137	41 138	1 138	18 138	37 138	52 139
3	0 138	34 138	52 139	9 139	26 139	43 140	0 140	17 140	34 140	51 141	11 141	28 141	45 142	3 142
15	141	57 142	13 142	29 143	45 143	1 143	17 143	33 143	49 144	5 144	23 144	39 144	55 145	12 145
30	145	20 145	35 145	50 146	5 146	19 146	33 146	48 147	3 147	18 147	33 147	48 148	4 148	18 148
45	148	45 148	59 149	12 149	26 149	38 149	51 150	5 150	19 150	33 150	46 150	59 151	13 151	28 151
4	0 152	10 152	22 152	32 152	46 152	58 153	10 153	22 153	35 153	47 153	59 154	11 154	24 154	36 154
15	155	36 155	47 155	58 156	8 156	19 156	30 156	40 156	51 157	2 157	13 157	23 157	34 157	45 157
30	159	4 159	13 159	22 159	31 159	40 159	50 159	59 160	8 160	18 160	27 160	36 160	46 160	35 161
45	162	35 162	44 162	50 162	26 163	3 163	10 163	18 163	25 163	33 163	41 163	49 163	57 164	6 164
5	0 166	2 166	8 166	14 166	20 166	26 166	32 166	38 166	44 166	50 166	57 167	3 167	9 167	16 167
15	169	30 169	35 169	40 169	44 169	48 169	53 169	58 170	2 170	7 170	13 170	17 170	22 170	26 170
30	173	0 173	3 173	6 173	9 173	12 173	15 173	18 173	21 173	24 173	28 173	31 173	34 173	37 173
45	176	29 176	32 176	33 176	34 176	36 176	38 176	40 176	41 176	43 176	44 176	45 176	47 176	50 176
6	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180

Table of Ascendants for Latitudes 21° to 34°.

Sid. Time.	21°	22°	23°	24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°
H. M.	°	°	°	°	°	°	°	°	°	°	°	°	°	°
6	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180	0 180
15	183	31 183	28 183	26 183	24 183	22 183	20 183	19 183	17 183	16 183	15 183	13 183	10 183	10
30	187	0 186	57 186	54 186	46 186	45 186	41 186	39 186	36 186	32 186	29 186	26 186	23 186	20
45	190	30 190	25 190	20 190	16 190	12 190	7 190	2 189	58 189	53 189	47 189	43 189	38 189	29
7	0 193	58 193	52 193	46 193	34 193	28 193	22 193	16 193	10 193	3 192	57 192	51 192	44 192	38
15	197	29 197	20 197	14 197	1 196	57 196	50 196	42 196	35 196	19 196	11 196	5 196	54 195	48
30	200	56 200	47 200	38 200	29 200	20 200	10 200	1 199	52 199	42 199	33 199	24 199	14 199	56
45	204	24 204	13 204	2 203	52 203	41 203	30 203	20 203	9 202	5 202	47 202	3 202	26 202	5
8	0 207	50 207	38 207	27 207	14 207	2 206	50 206	38 206	25 206	13 206	1 205	49 205	36 205	12
15	211	15 211	12 210	48 210	34 210	22 210	9 209	55 209	41 209	27 209	14 209	1 208	47 208	20
30	214	40 214	25 214	10 213	55 213	42 213	27 213	12 212	57 212	42 212	27 212	11 211	56 211	26
45	218	32 217	31 217	15 216	59 216	43 216	27 216	11 215	55 215	37 215	32 215	22 215	15 217	39
9	0 221	26 221	8 221	51 220	34 220	17 220	0 219	26 219	19 219	9 218	49 218	32 218	15 217	45
15	224	46 224	28 224	10 223	53 223	34 223	16 222	43 222	19 222	5 222	42 222	23 221	32 220	45
30	228	42 227	47 227	28 227	9 226	5 226	30 226	10 225	51 225	3 225	50 224	30 224	9 223	48
45	231	29 231	7 230	46 230	26 230	6 229	45 229	24 229	3 228	41 228	20 227	58 227	37 227	53
10	0 234	46 234	25 234	3 233	42 233	21 232	59 232	3 232	15 231	52 231	20 227	58 227	37 227	59
15	238	6 237	43 237	2 236	58 236	36 236	13 235	51 235	28 235	4 234	39 234	16 233	53 233	4
30	241	22 241	0 240	37 240	1 239	50 239	27 239	3 238	14 237	49 237	35 237	20 236	35 236	9
45	244	42 244	18 243	54 243	3 243	6 242	41 242	16 241	51 241	28 241	0 240	35 240	9 239	15
11	0 248	0 247	36 247	1 246	46 246	21 245	55 245	2 245	4 244	38 244	11 243	44 243	17 242	22
15	251	18 250	53 250	28 250	3 249	37 249	11 248	44 248	17 247	49 247	22 246	51 246	26 245	29
30	254	38 254	12 253	46 253	2 252	5 252	26 251	5 251	4 251	31 251	2 250	44 250	36 249	37
45	257	58 257	32 257	5 256	3 256	11 255	43 255	15 254	46 254	17 253	48 253	19 252	49 252	47
12	0 261	19 260	52 260	25 259	29 259	1 258	31 258	4 257	34 257	3 256	34 256	3 255	31 254	58

Table of Ascendants for Latitudes 21° to 34°.

56

Sid. Time.	21°	22°	23°	24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°
H. M.	°	'	°	'	°	'	°	'	°	'	°	'	°	'
12 0	261	19 260	52 260	25 259	57 259	29 259	0 258	31 258	4 257	34 257	3 256	34 256	3 255	31 254
15 0	264	41 264	14 263	45 263	18 262	49 262	20 261	51 261	22 260	51 260	19 259	49 259	18 258	45 258
30 0	268	6 267	38 267	8 266	41 266	12 265	42 265	12 264	42 264	11 263	39 263	8 262	36 262	2 261
45 0	271	32 271	4 270	35 270	6 269	38 269	7 268	37 268	6 267	34 267	1 266	29 265	56 265	22 264
13 0	275	1 274	33 274	4 273	34 273	6 272	34 272	4 271	33 271	0 270	27 269	54 269	21 268	46 268
15 0	278	32 278	3 277	35 277	5 276	36 276	4 275	34 275	2 274	23 273	55 273	22 272	48 272	12 271
30 0	282	7 281	38 281	9 280	39 280	10 279	38 279	8 278	35 278	2 277	28 276	54 276	19 275	43 275
45 0	285	46 285	17 284	48 284	18 283	49 283	17 282	47 282	13 281	40 281	5 280	32 279	57 279	20 278
14 0	289	28 288	59 288	3 288	0 287	31 286	59 286	29 285	55 285	22 284	48 284	14 283	36 283	1 282
15 0	293	14 292	46 292	17 291	48 291	18 290	46 290	16 289	43 289	10 288	35 288	1 287	25 286	49 286
30 0	297	5 296	38 296	9 295	40 295	11 294	11 294	11 293	38 293	5 292	30 291	57 291	2 290	43 290
45 0	301	2 300	34 300	7 299	38 299	9 298	39 298	10 297	38 297	5 296	31 295	57 295	22 294	45 294
15 0	305	2 304	36 304	8 303	41 303	13 302	44 302	14 301	42 301	10 300	36 300	3 299	28 298	52 298
30 0	309	9 308	44 308	18 307	51 307	24 306	55 306	26 305	56 305	24 304	52 304	2 303	46 303	10 302
45 0	313	22 312	59 312	54 312	8 311	42 311	15 310	47 310	18 309	48 309	17 308	45 308	13 307	38 307
16 0	317	41 317	18 316	56 316	31 316	6 315	40 315	14 314	47 314	18 313	48 313	19 312	48 312	15 311
15 0	322	5 321	43 321	21 320	59 320	36 320	12 319	48 319	23 318	55 318	27 317	59 317	30 316	59 316
30 0	326	33 326	15 325	56 325	35 325	14 324	52 324	30 324	6 323	42 323	16 322	51 322	24 321	55 321
45 0	330	9 330	35 330	16 329	57 329	38 329	14 328	57 328	5 327	35 327	12 327	50 327	25 326	59 326
17 0	335	49 335	35 335	19 335	3 334	48 334	31 334	14 333	55 333	36 333	29 332	12 332	36 332	13 331
30 0	340	34 340	22 340	9 339	56 339	43 339	30 339	16 339	41 338	44 338	29 338	12 337	37 337	35 337
45 0	345	22 345	13 345	3 344	54 344	41 344	33 344	22 344	11 343	59 343	46 343	33 343	19 343	4 342
18 0	350	14 350	7 350	1 349	54 349	47 349	41 349	34 349	25 349	17 349	8 348	59 348	49 348	40 348
45 0	355	7 355	4 354	59 354	53 354	49 354	46 354	42 354	38 354	33 354	29 354	24 354	19 354	14 354
18 0	360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360

Table of Ascendants for Latitudes 21° to 34°.

57

Sid. Time.	21°	22°	23°	24°	25°	26°	27°	28°	29°	30°	31°	32°	33°	34°
H. M.	°	'	°	'	°	'	°	'	°	'	°	'	°	'
18 0	360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360	0 360
15 0	4 53	4 53	5 53	9 53	10 53	11 53	14 53	18 53	22 53	27 53	31 53	36 53	41 53	46 53
30 0	9 46	9 46	10 46	15 46	16 46	17 46	20 46	24 46	29 46	34 46	39 46	44 46	49 46	54 46
45 0	14 38	14 38	15 38	20 38	21 38	22 38	25 38	29 38	34 38	39 38	44 38	49 38	54 38	59 38
19 0	19 26	19 26	20 26	25 26	26 26	27 26	30 26	34 26	39 26	44 26	49 26	54 26	59 26	64 26
15 0	24 11	24 11	25 11	30 11	31 11	32 11	35 11	39 11	44 11	49 11	54 11	59 11	64 11	69 11
30 0	28 51	28 51	29 51	34 51	35 51	36 51	39 51	43 51	48 51	53 51	58 51	63 51	68 51	73 51
45 0	33 37	33 37	34 37	39 37	40 37	41 37	44 37	48 37	53 37	58 37	63 37	68 37	73 37	78 37
20 0	37 55	37 55	38 55	43 55	44 55	45 55	48 55	52 55	57 55	62 55	67 55	72 55	77 55	82 55
15 0	42 19	42 19	43 19	48 19	49 19	50 19	53 19	57 19	62 19	67 19	72 19	77 19	82 19	87 19
30 0	46 38	46 38	47 38	52 38	53 38	54 38	57 38	61 38	66 38	71 38	76 38	81 38	86 38	91 38
45 0	50 51	50 51	51 51	56 51	57 51	58 51	61 51	65 51	70 51	75 51	80 51	85 51	90 51	95 51
21 0	54 58	54 58	55 58	60 58	61 58	62 58	65 58	69 58	74 58	79 58	84 58	89 58	94 58	99 58
15 0	58 58	58 58	59 58	64 58	65 58	66 58	69 58	73 58	78 58	83 58	88 58	93 58	98 58	103 58
30 0	62 55	62 55	63 55	68 55	69 55	70 55	73 55	77 55	82 55	87 55	92 55	97 55	102 55	107 55
45 0	66 46	66 46	67 46	72 46	73 46	74 46	77 46	81 46	86 46	91 46	96 46	101 46	106 46	111 46
22 0	70 32	70 32	71 32	76 32	77 32	78 32	81 32	85 32	90 32	95 32	100 32	105 32	110 32	115 32
15 0	74 14	74 14	75 14	80 14	81 14	82 14	85 14	89 14	94 14	99 14	104 14	109 14	114 14	119 14
30 0	77 53	77 53	78 53	83 53	84 53	85 53	88 53	92 53	97 53	102 53	107 53	112 53	117 53	122 53
45 0	81 28	81 28	82 28	87 28	88 28	89 28	92 28	96 28	101 28	106 28	111 28	116 28	121 28	126 28
23 0	84 59	84 59	85 59	90 59	91 59	92 59	95 59	99 59	104 59	109 59	114 59	119 59	124 59	129 59
15 0	88 28	88 28	89 28	94 28	95 28	96 28	99 28	103 28	108 28	113 28	118 28	123 28	128 28	133 28
30 0	91 54	91 54	92 54	97 54	98 54	99 54	102 54	106 54	111 54	116 54	121 54	126 54	131 54	136 54
45 0	95 19	95 19	96 19	101 19	102 19	103 19	106 19	110 19	115 19	120 19	125 19	130 19	135 19	140 19
24 0	98 41	98 41	99 41	104 41	105 41	106 41	109 41	113 41	118 41	123 41	128 41	133 41	138 41	143 41

Tables of Houses for Bombay, Lat. 18° N. 57'

58

Sid. Time.	10	1112	Asc.	2	3Sid. Time.	10	1112	Asc.	2	3Sid. Time.	10	1112	Asc.	2	3
H. M.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	1	22	5	8	8	55	3	0	55	3	0	55	3	0	55
10	2	43	7	10	10	3	5	2	10	4	47	7	8	6	10
15	4	5	8	11	11	10	6	3	15	6	4	8	9	7	15
20	5	27	9	12	12	18	7	5	20	7	21	9	10	9	20
25	6	48	11	13	13	24	8	6	25	8	38	11	11	10	25
30	8	10	12	14	14	31	9	7	30	9	54	12	11	11	30
35	9	31	13	15	15	38	11	8	35	11	11	13	12	12	35
40	10	53	14	16	16	45	12	9	40	12	27	14	13	12	40
45	12	14	15	18	17	52	13	10	45	13	42	15	14	13	45
50	13	35	17	19	18	58	14	12	50	14	57	16	15	13	50
55	14	56	18	20	20	5	15	13	55	16	13	17	16	14	55
1	0	16	17	19	21	11	16	14	3	0	17	28	18	18	1
5	5	17	37	21	23	22	18	16	5	5	18	42	20	19	5
10	18	58	22	24	23	24	19	17	10	19	57	21	21	20	10
15	20	18	23	25	24	31	20	18	15	21	11	22	22	21	15
20	21	38	25	26	25	38	21	20	20	22	25	23	24	22	20
25	22	58	26	27	26	45	22	21	25	23	38	24	25	23	25
30	24	18	27	28	27	52	23	22	30	24	51	26	26	24	30
35	25	38	29	0	28	57	25	24	35	26	4	27	26	25	35
40	26	57	0	1	0	5	26	25	40	27	17	28	27	26	40
45	28	16	1	2	1	11	27	26	45	28	29	29	28	27	45
50	29	34	2	3	2	17	28	28	50	29	42	1	0	29	50
55	0	53	3	4	3	24	29	29	55	0	0	54	2	1	55

Tables of Houses for Bombay, Lat. 18° N. 57'

59

Sid. Time.	10	1112	Asc.	2	3Sid. Time.	10	1112	Asc.	2	3Sid. Time.	10	1112	Asc.	2	3
H. M.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	1	9	1	2	1	11	0	1	5	29	7	1	126	36	26
10	2	18	2	3	2	22	2	2	10	5	0	27	49	0	25
15	3	26	3	4	3	33	3	3	15	25	4	23	6	1	3
20	4	35	5	5	4	45	5	4	20	30	5	42	8	7	2
25	5	44	6	7	5	56	6	5	25	35	7	2	9	8	3
30	6	53	7	8	7	67	7	6	30	40	8	22	10	9	4
35	8	2	8	9	8	17	8	8	35	45	9	42	12	10	5
40	9	11	9	10	9	29	9	9	40	50	11	42	13	11	6
45	10	20	11	11	10	40	10	10	45	55	12	23	14	13	7
50	11	30	12	13	11	49	11	11	50	0	13	43	16	14	8
55	12	39	14	14	13	1	13	13	55	5	15	47	15	15	9
0	13	48	15	15	14	22	15	14	0	10	16	25	18	16	11
5	14	58	16	16	15	33	16	15	5	11	17	46	20	17	12
10	16	8	17	17	16	44	17	16	10	16	18	7	21	18	13
15	17	18	18	18	17	55	18	17	15	17	19	29	22	19	14
20	18	28	19	19	18	5	19	18	20	19	20	29	23	20	15
25	19	38	21	21	20	4	20	19	25	20	21	50	23	21	16
30	20	48	22	23	21	14	21	21	30	21	22	11	24	22	17
35	21	59	23	24	22	24	22	22	35	23	23	33	25	23	18
40	23	10	24	25	23	34	23	23	40	24	24	33	26	24	19
45	24	20	22	26	24	45	24	24	45	25	25	55	27	25	20
50	25	32	27	27	25	55	25	25	50	27	27	16	28	25	21
55	26	43	28	29	27	4	27	26	55	28	28	38	0	26	22

Tables of Houses for Madras, Lat. 13° N. 4'.

62

Sid. Time.	10	11 12	Asc.	2 3	Sid. Time.	10	11 12	Asc.	2 3	Sid. Time.	10	11 12	Asc.	2 3
H. M.	°	′	″	°	H. M.	°	′	″	°	H. M.	°	′	″	°
0	0	0	0	15 129	2	0	11	4	2	4	0	5	2	0
5	1	22	4	23 2	5	0	29	5	4	5	0	17	3	0
10	2	43	6	33 3	10	4	47	6	4	10	4	28	4	1
15	4	5	7	39 4	15	6	21	7	5	15	5	39	5	2
20	5	27	8	47 5	20	8	38	8	7	20	6	50	6	3
25	6	48	10	54 7	25	30	54	11	9	25	8	11	7	4
30	8	10	11	58 12	30	35	11	12	10	30	9	11	8	5
35	9	31	13	10 10	35	40	27	13	11	35	10	22	9	6
40	10	53	14	19 11	40	45	13	42	14	40	11	32	10	7
45	12	14	15	27 12	45	50	14	57	16	45	12	42	11	8
50	13	35	16	34 13	50	55	16	13	17	50	13	52	13	9
55	14	56	18	42 14	3	0	28	17	18	55	15	21	14	10
1	0	17	19	49 15	5	10	18	42	18	5	16	12	15	11
5	17	37	20	57 16	10	15	21	57	20	17	17	21	16	12
10	18	58	21	5 17	15	20	22	25	22	10	18	30	17	13
15	20	18	22	13 18	20	25	23	38	23	15	19	39	18	14
20	21	38	23	21 19	25	30	24	42	24	20	20	49	20	15
25	22	58	25	29 21	30	35	26	46	26	25	21	58	21	16
30	24	18	26	37 22	35	40	27	17	27	30	22	7	22	17
35	25	38	27	49 23	40	45	28	29	28	35	23	16	23	18
40	26	57	29	54 25	45	50	29	42	0	40	24	25	24	19
45	28	16	0	2 26	50	55	0	54	1	45	25	33	25	20
50	29	34	2	9 28	55	0	0	54	1	50	26	42	26	21
55	0	53	3	19 29	55	0	0	54	1	55	27	51	27	22

Tables of Houses for Madras, Lat. 13° N. 4'.

63

Sid. Time.	10th.	11 12	Asc.	2 3	Sid. Time.	10	11 12	Asc.	2 3	Sid. Time.	10	11 12	Asc.	2 3
H. M.	°	′	″	°	H. M.	°	′	″	°	H. M.	°	′	″	°
6	0	0	0	0	8	0	54	29	0	10	0	49	0	27
5	1	9	0	14 1	5	10	18	2	1	5	1	26	3	29
10	2	18	1	29 2	10	15	30	3	3	10	2	33	4	30
15	3	26	3	42 4	15	20	43	4	4	15	3	41	5	31
20	4	35	4	57 5	20	25	56	5	5	20	4	48	6	32
25	5	44	5	66 6	25	30	6	6	6	25	5	55	7	33
30	6	53	7	77 7	30	35	22	8	7	30	6	62	8	34
35	8	2	8	8 8	35	40	35	9	8	35	7	69	9	35
40	9	11	9	19 9	40	45	49	10	9	40	8	76	10	36
45	10	20	10	29 10	45	50	17	14	10	45	9	83	11	37
50	11	30	11	38 11	50	55	17	15	11	50	10	90	12	38
55	12	39	12	46 12	55	0	32	15	12	55	11	97	13	39
0	13	48	14	54 13	0	5	37	16	13	0	12	104	14	40
5	14	58	15	16 14	5	10	41	17	14	5	13	111	15	41
10	16	8	16	17 15	10	15	44	18	15	10	14	118	16	42
15	17	18	17	25 16	15	20	47	19	16	15	15	125	17	43
20	18	28	18	34 17	20	25	50	20	17	20	16	132	18	44
25	19	38	20	43 18	25	30	53	21	18	25	17	139	19	45
30	20	48	22	52 19	30	35	56	22	19	30	18	146	20	46
35	21	59	23	61 20	35	40	59	23	20	35	19	153	21	47
40	23	10	24	70 21	40	45	62	24	21	40	20	160	22	48
45	24	20	25	79 22	45	50	65	25	22	45	21	167	23	49
50	25	32	26	88 23	50	55	68	26	23	50	22	174	24	50
55	26	43	28	97 24	55	0	71	27	24	55	23	181	25	51

Tables of Houses for Madras, Lat. 13° N. 4'

64

Sid. Time.	10	11 12	Asc.	2 3	Sid. Time.	10	11 12	Asc.	2 3	Sid. Time.	10	11 12	Asc.	2 3
H. M.	°	'	''	'''	H. M.	°	'	''	'''	H. M.	°	'	''	'''
12 0	0	0	1 29 24	46 25 27	14 0	2	11	0 27 22	58 25 0	16 0	2	5 29 25 24	34 0 4	γ
5	1	22 2	0 25	53 26 28	5	3	29	2 28 24	12 26 2		3	17 0 26 25	58 2 5	δ
10 2	2	43 3	1 27	1 27 29	10	4	47	3 29 25	26 28 3		4	28 1 27 27	24 3 7	ε
15	4	5 5	2 28	10 28 1	15	6	4	0 26	41 0 5		5	39 2 28 28	49 5 8	ζ
20	5	27 6	3 29	19 29 2	20	8	38	6 2 29	11 2 7		6	50 3 29 0	15 6 9	η
25	6	48 7	4 0	28 1 4	25	30	9	54 8 3	0 28 4 9		8	1 4 1 1	42 7 10	θ
30	8	10 8	5 1	36 2 5	30	35	11	11 9 4	1 44 5 11		9	11 5 2 3	9 9 12	ι
35	9	31 10	6 2	45 3 7	35	40	12	17 10 5	3 1 7 12		10	22 6 3 4	37 10 13	κ
40	10	53 11	8 3	55 5 8	40	45	13	42 11 6	4 18 8 13		11	32 8 4 6	31 12 14	λ
45	12	14 12	9 5	4 6 10	45	50	14	57 12 8	5 35 10 14		12	42 9 5 7	31 13 15	μ
50	13	35 13	10 6	14 7 11	50	55	16	13 13 9	6 55 11 16		13	52 10 7 9	0 15 16	ν
55	14	56 15	12 7	25 8 12	55	17	17	28 14 10	8 13 13 17		15	2 12 8 10	28 16 18	ξ
13 5	17	37 17	14 9	44 10 15	15 5	18	19	57 17 13	10 32 14 19	17	16	12 13 9 11	58 17 19	ο
10	18	58 19	15 10	55 12 16	10	21	21	11 18 14	12 12 17 22		17	21 14 10 13	26 19 20	π
15	20	18 20	16 12	6 13 18	15	22	22	25 19 15	13 32 19 23		18	30 15 12 14	55 20 21	ρ
20	21	38 21	17 13	17 14 19	20	23	23	38 20 16	14 53 20 24		19	39 16 13 16	25 22 23	σ
25	22	58 22	19 14	29 16 20	25	30	24	51 22 18	16 15 21 25		20	49 17 15 17	55 23 24	τ
30	24	18 23	20 15	41 17 22	30	35	26	4 23 19	17 37 23 27		21	58 18 16 19	23 25 25	υ
35	25	38 24	21 16	52 18 23	35	40	27	17 24 20	18 59 24 29		23	7 20 18 20	56 26 27	φ
40	26	57 26	22 18	5 20 24	40	45	28	29 25 21	20 23 26 0		24	16 21 19 22	27 28 28	χ
45	28	16 27	23 19	18 21 26	45	50	29	42 26 22	21 47 27 1		25	25 22 21 23	57 29 29	ψ
50	29	24 28	24 20	30 22 27	50	55	0	54 27 24	23 10 29 2		26	33 23 22 25	29 0 0	ω
55	0	53 29	25 21	44 24 29	55	0	0	54 27 24 23	10 29 2		28	42 24 24 26	58 2 1	α

Tables of Houses for Madras, Lat. 13° N. 4'

65

Sid. Time.	10	11 12	Asc.	2 3	Sid. Time.	10	11 12	Asc.	2 3	Sid. Time.	10	11 12	Asc.	2 3
H. M.	°	'	''	'''	H. M.	°	'	''	'''	H. M.	°	'	''	'''
18 0	0	0 26 26	0	0 4 4	18 0	27	54 27	0 5	26 5 2	22 0	27	49 0 5 7	2 4 0	α
5	1	9 28 27	1	30 6 6	5	29	6 28	2 6	50 7 4	5	29	7 2 6 8	16 5 1	β
10	2	18 29 29	3	2 7 7	10	0	18	0 3 8	13 8 5	10	0	26 3 8 9	30 6 2	γ
15	3	26 0 0	4	31 9 8	15	1	30	1 5 9	37 9 6	15	1	44 5 9 10	42 7 3	δ
20	4	35 1 1	6	3 10 9	20	2	43	2 6 11	1 10 7 8	20	2	23 8 12 13	55 8 4	ε
25	5	44 2 2	7	33 12 10	25	3	56	4 7 12	23 11 8	25	3	42 9 13 14	8 9 6	ζ
30	6	43 3 4	9	4 13 11	30	5	9	5 9 13	45 13 9	30	5	22 10 14 15	19 10 7	η
35	8	2 5	5 10	35 14 12	35	6	22	6 10 15	7 14 10	35	7	22 12 16 16	43 13 9	θ
40	9	11 7	6 12	5 16 14	40	7	35	7 12 16	28 15 11	40	8	42 13 17 17	54 14 10	ι
45	10	20 8	8 13	35 17 15	45	8	49	8 13 17	48 16 12	45	9	22 14 18 19	5 15 11	κ
50	11	30 9	9 15	5 19 16	50	10	3	10 14 19	8 17 13	50	11	22 16 20 20	16 16 13	λ
55	12	39 10	11 16	34 20 17	55	11	17	12 16 20	28 19 15	55	12	22 16 20 21	35 18 15	μ
19 0	13	48 11	12 18	2 21 18	19 0	12	32	13 17 21	47 20 16	23 0	13	53 17 21 21	25 17 14	ν
5	14	58 12	14 19	23 22 19	5	13	47	14 19 23	5 21 17	5	15	4 18 22 22	35 18 15	ξ
10	16	8 14	15 21	0 24 21	10	15	3	16 20 24	25 22 18	10	16	25 20 24 23	46 20 16	ο
15	17	18 15	17 22	29 25 22	15	16	17	17 22 25	42 24 19	15	17	46 21 25 24	56 21 18	π
20	18	28 16	18 23	57 26 23	20	17	33	19 23 26	59 25 20	20	19	7 22 27 26	5 22 19	ρ
25	19	38 17	20 25	23 27 24	25	18	49	20 25 28	16 26 21	25	20	29 24 28 27	15 23 21	σ
30	20	48 19	21 26	51 28 25	30	20	5	21 26 29	32 27 22	30	21	50 25 29 28	24 24 21	τ
35	21	59 20	23 28	18 29 26	35	21	22	23 28	0 49 28 24	35	23	17 26 0 29	32 26 22	υ
40	23	10 22	24 29	45 1 28	40	22	39	24 29 2	4 29 25	40	24	33 28 1 0	41 27 23	φ
45	24	20 23	26 1	11 2 29	45	23	56	26 0 3	19 0 26	45	25	55 29 2 1	50 28 25	χ
50	25	32 24	27 2	36 3 0	50	25	13	27 2 4	34 2 27	55	28	38 1 4 4	7 0 27	α
55	26	43 25	29 4	2 4 1	55	26	31	29 3 5	48 3 28	24 0	29	0 3 5 5	15 1 29	β

LOGARITHMIC TABLE.

66

Hours or Degrees.

Min.	0	1	2	3	4	5	6	7	8	9	10	11	Min.
0	3.1584	1.3802	1.0792	.9031	.7781	.6812	.6021	.5351	.4771	.4260	.3802	.3388	0
1	3.1584	1.3730	1.0756	.9007	.7763	.6798	.6009	.5341	.4762	.4252	.3797	.3382	1
2	2.8573	1.3660	1.0720	.8983	.7745	.6784	.5997	.5330	.4753	.4244	.3788	.3375	2
3	2.8612	1.3590	1.0685	.8959	.7728	.6769	.5985	.5320	.4744	.4236	.3780	.3368	3
4	2.5563	1.3522	1.0649	.8935	.7710	.6755	.5973	.5310	.4735	.4228	.3773	.3362	4
5	2.4594	1.3454	1.0614	.8912	.7692	.6741	.5961	.5300	.4728	.4220	.3766	.3355	5
6	2.3802	1.3388	1.0580	.8888	.7674	.6726	.5949	.5289	.4717	.4212	.3759	.3349	6
7	2.3133	1.3323	1.0546	.8865	.7657	.6712	.5937	.5279	.4708	.4204	.3752	.3342	7
8	2.2553	1.3258	1.0511	.8842	.7639	.6698	.5925	.5269	.4699	.4196	.3745	.3336	8
9	2.2041	1.3195	1.0478	.8819	.7622	.6684	.5913	.5259	.4680	.4188	.3737	.3329	9
10	2.1584	1.3133	1.0444	.8796	.7604	.6670	.5902	.5249	.4682	.4180	.3730	.3323	10
11	2.1170	1.3071	1.0411	.8773	.7587	.6656	.5890	.5239	.4673	.4172	.3723	.3316	11
12	2.0792	1.3010	1.0378	.8751	.7570	.6642	.5878	.5229	.4664	.4164	.3716	.3310	12
13	2.0444	1.2950	1.0345	.8728	.7552	.6628	.5866	.5219	.4655	.4156	.3709	.3303	13
14	2.0122	1.2891	1.0313	.8706	.7535	.6614	.5855	.5209	.4646	.4148	.3702	.3297	14
15	1.9823	1.2833	1.0280	.8683	.7518	.6600	.5843	.5199	.4638	.4141	.3695	.3291	15
16	1.9542	1.2775	1.0248	.8661	.7501	.6587	.5832	.5189	.4629	.4133	.3688	.3284	16
17	1.9279	1.2719	1.0216	.8639	.7484	.6573	.5820	.5179	.4620	.4133	.3681	.3278	17
18	1.9031	1.2663	1.0185	.8617	.7467	.6559	.5809	.5169	.4611	.4117	.3674	.3271	18
19	1.8796	1.2607	1.0153	.8595	.7451	.6546	.5797	.5159	.4603	.4109	.3667	.3265	19
20	1.8573	1.2553	1.0122	.8573	.7434	.6532	.5786	.5149	.4594	.4102	.3660	.3258	20
21	1.8361	1.2499	1.0091	.8552	.7417	.6519	.5774	.5139	.4585	.4094	.3653	.3252	21
22	1.8159	1.2445	1.0061	.8530	.7401	.6505	.5761	.5129	.4577	.4086	.3646	.3246	22
23	1.7966	1.2393	1.0030	.8509	.7384	.6492	.5752	.5120	.4568	.4079	.3639	.3243	23
24	1.7781	1.2341	1.0000	.8487	.7368	.6478	.5740	.5110	.4559	.4071	.3632	.3233	24
25	1.7604	1.2289	.9970	.8466	.7351	.6465	.5729	.5100	.4551	.4063	.3625	.3227	25
26	1.7434	1.2239	.9940	.8445	.7335	.6451	.5718	.5090	.4542	.4055	.3618	.3220	26
27	1.7270	1.2188	.9910	.8424	.7318	.6438	.5706	.5081	.4524	.4048	.3611	.3214	27
28	1.7112	1.2139	.9881	.8403	.7302	.6425	.5695	.5071	.4525	.4040	.3604	.3208	28
29	1.6960	1.2090	.9852	.8382	.7286	.6412	.5684	.5061	.4516	.4032	.3597	.3201	29

LOGARITHMIC TABLE.

67

Hours or Degrees.

Min.	0	1	2	3	4	5	6	7	8	9	10	11	Min.
30	1.6812	1.2041	.9823	.8361	.7270	.6398	.5673	.5051	.4508	.4025	.3590	.3195	30
31	1.6670	1.1993	.9794	.8341	.7254	.6385	.5662	.5042	.4499	.4017	.3583	.3189	31
32	1.6532	1.1946	.9765	.8327	.7238	.6372	.5651	.5032	.4491	.4010	.3576	.3183	32
33	1.6398	1.1899	.9737	.8300	.7222	.6359	.5640	.5023	.4482	.4002	.3570	.3176	33
34	1.6269	1.1852	.9708	.8279	.7206	.6346	.5629	.5013	.4474	.3994	.3563	.3170	34
35	1.6143	1.1806	.9680	.8259	.7190	.6333	.5618	.5003	.4466	.3987	.3556	.3164	35
36	1.6021	1.1761	.9652	.8239	.7174	.6320	.5607	.4994	.4457	.3979	.3549	.3157	36
37	1.5902	1.1716	.9625	.8219	.7159	.6307	.5596	.4984	.4449	.3972	.3542	.3151	37
38	1.5786	1.1671	.9597	.8199	.7143	.6294	.5585	.4975	.4440	.3964	.3535	.3145	38
39	1.5673	1.1627	.9570	.8179	.7128	.6282	.5573	.4965	.4432	.3957	.3529	.3139	39
40	1.5563	1.1584	.9542	.8159	.7112	.6269	.5563	.4956	.4424	.3949	.3522	.3133	40
41	1.5456	1.1540	.9515	.8140	.7097	.6256	.5552	.4947	.4415	.3942	.3515	.3126	41
42	1.5351	1.1498	.9488	.8120	.7081	.6243	.5541	.4937	.4407	.3934	.3508	.3120	42
43	1.5249	1.1455	.9462	.8101	.7066	.6231	.5531	.4928	.4399	.3927	.3501	.3114	43
44	1.5149	1.1413	.9435	.8081	.7050	.6218	.5520	.4918	.4390	.3919	.3495	.3108	44
45	1.5051	1.1372	.9409	.8062	.7035	.6205	.5509	.4909	.4382	.3912	.3488	.3102	45
46	1.4956	1.1331	.9383	.8042	.7020	.6193	.5498	.4900	.4374	.3905	.3481	.3096	46
47	1.4863	1.1290	.9356	.8023	.7005	.6180	.5488	.4890	.4365	.3897	.3475	.3089	47
48	1.4771	1.1249	.9330	.8004	.6990	.6168	.5478	.4881	.4357	.3890	.3468	.3083	48
49	1.4682	1.1209	.9305	.7985	.6975	.6155	.5466	.4872	.4349	.3882	.3461	.3077	49
50	1.4594	1.1170	.9279	.7966	.6960	.6143	.5456	.4863	.4341	.3875	.3454	.3071	50
51	1.4508	1.1130	.9254	.7947	.6945	.6131	.5445	.4853	.4333	.3868	.3448	.3065	51
52	1.4424	1.1091	.9228	.7929	.6930	.6118	.5435	.4844	.4324	.3860	.3441	.3059	52
53	1.4341	1.1053	.9203	.7910	.6915	.6101	.5424	.4835	.4316	.3853	.3434	.3053	53
54	1.4260	1.1015	.9178	.7891	.6900	.6094	.5414	.4826	.4308	.3846	.3428	.3047	54
55	1.4180	1.0977	.9153	.7873	.6885	.6081	.5403	.4817	.4300	.3838	.3421	.3041	55
56	1.4102	1.0939	.9128	.7854	.6871	.6069	.5393	.4808	.4292	.3831	.3415	.3034	56
57	1.4025	1.0902	.9104	.7836	.6856	.6057	.5382	.4798	.4284	.3824	.3408	.3028	57
58	1.3949	1.0865	.9079	.7818	.6841	.6045	.5372	.4789	.4276	.3817	.3401	.3022	58
59	1.3875	1.0828	.9055	.7800	.6827	.6033	.5361	.4780	.4268	.3809	.3395	.3016	59

LOGARITHMIC TABLE.

68.

Hours or Degrees.

Min.	12	13	14	15	16	17	18	19	20	21	22	23	Min.
0	.3010	.2663	.2341	.2041	.1761	.1498	.1249	.1015	.0792	.0580	.0378	.0185	0
1	.3004	.2657	.2336	.2036	.1756	.1493	.1245	.1011	.0788	.0576	.0375	.0182	1
2	.2998	.2652	.2330	.2030	.1750	.1487	.1240	.1007	.0785	.0573	.0371	.0179	2
3	.2992	.2646	.2325	.2027	.1747	.1485	.1237	.1003	.0781	.0570	.0368	.0175	3
4	.2986	.2640	.2320	.2022	.1743	.1481	.1233	.0999	.0778	.0566	.0366	.0172	4
5	.2980	.2635	.2315	.2017	.1738	.1476	.1229	.0996	.0774	.0563	.0361	.0169	5
6	.2974	.2629	.2310	.2012	.1734	.1472	.1225	.0992	.0770	.0559	.0358	.0166	6
7	.2968	.2624	.2305	.2008	.1729	.1468	.1221	.0988	.0766	.0556	.0355	.0163	7
8	.2962	.2618	.2300	.2003	.1725	.1464	.1217	.0984	.0763	.0552	.0352	.0160	8
9	.2956	.2613	.2295	.1998	.1720	.1459	.1213	.0980	.0759	.0549	.0348	.0157	9
10	.2950	.2607	.2289	.1993	.1716	.1455	.1209	.0977	.0756	.0546	.0346	.0154	10
11	.2944	.2602	.2284	.1988	.1711	.1451	.1205	.0973	.0752	.0542	.0342	.0150	11
12	.2938	.2596	.2279	.1984	.1707	.1447	.1201	.0969	.0749	.0539	.0339	.0147	12
13	.2933	.2591	.2274	.1979	.1702	.1443	.1197	.0965	.0745	.0535	.0335	.0144	13
14	.2927	.2585	.2269	.1974	.1698	.1438	.1193	.0962	.0741	.0532	.0332	.0141	14
15	.2921	.2580	.2264	.1969	.1694	.1434	.1190	.0958	.0738	.0529	.0329	.0138	15
16	.2915	.2574	.2259	.1965	.1689	.1430	.1186	.0954	.0734	.0525	.0326	.0135	16
17	.2909	.2569	.2253	.1960	.1685	.1426	.1182	.0950	.0731	.0522	.0322	.0132	17
18	.2903	.2564	.2249	.1955	.1680	.1422	.1178	.0947	.0727	.0518	.0318	.0129	18
19	.2897	.2558	.2244	.1950	.1676	.1417	.1174	.0943	.0724	.0515	.0316	.0125	19
20	.2891	.2553	.2239	.1946	.1671	.1413	.1170	.0939	.0720	.0512	.0313	.0122	20
21	.2885	.2547	.2234	.1941	.1667	.1409	.1166	.0935	.0716	.0508	.0309	.0119	21
22	.2880	.2542	.2229	.1936	.1662	.1405	.1162	.0932	.0713	.0505	.0306	.0116	22
23	.2874	.2536	.2223	.1932	.1658	.1401	.1158	.0928	.0709	.0501	.0303	.0113	23
24	.2868	.2531	.2218	.1927	.1654	.1397	.1154	.0924	.0706	.0498	.0300	.0110	24
25	.2862	.2526	.2213	.1922	.1649	.1392	.1150	.0920	.0702	.0495	.0296	.0107	25
26	.2856	.2520	.2208	.1917	.1645	.1388	.1146	.0917	.0699	.0491	.0293	.0104	26
27	.2850	.2515	.2203	.1913	.1640	.1384	.1142	.0913	.0695	.0488	.0290	.0101	27
28	.2845	.2509	.2198	.1908	.1636	.1380	.1138	.0909	.0692	.0484	.0287	.0098	28
29	.2839	.2504	.2193	.1903	.1632	.1376	.1134	.0906	.0688	.0481	.0284	.0095	29

LOGARITHMIC TABLE.

69.

Hours or Degrees.

Min.	12	13	14	15	16	17	18	19	20	21	22	23	Min.
30	.2833	.2493	.2188	.1899	.1627	.1372	.1130	.0902	.0685	.0478	.0280	.0091	30
31	.2827	.2487	.2183	.1894	.1623	.1369	.1127	.0898	.0681	.0474	.0277	.0088	31
32	.2821	.2482	.2178	.1889	.1618	.1363	.1123	.0894	.0678	.0471	.0274	.0085	32
33	.2816	.2477	.2173	.1885	.1614	.1359	.1119	.0891	.0674	.0468	.0271	.0082	33
34	.2810	.2472	.2168	.1880	.1610	.1355	.1115	.0887	.0670	.0464	.0267	.0079	34
35	.2804	.2467	.2164	.1875	.1605	.1351	.1111	.0883	.0667	.0461	.0264	.0076	35
36	.2798	.2462	.2159	.1871	.1601	.1347	.1107	.0880	.0663	.0458	.0261	.0073	36
37	.2793	.2457	.2154	.1866	.1597	.1343	.1103	.0876	.0660	.0454	.0258	.0070	37
38	.2787	.2452	.2149	.1862	.1592	.1339	.1100	.0872	.0656	.0451	.0255	.0067	38
39	.2781	.2447	.2144	.1857	.1588	.1335	.1095	.0869	.0652	.0448	.0251	.0064	39
40	.2775	.2442	.2139	.1852	.1584	.1331	.1091	.0865	.0649	.0444	.0248	.0061	40
41	.2770	.2437	.2134	.1848	.1579	.1326	.1088	.0861	.0646	.0441	.0245	.0058	41
42	.2764	.2432	.2129	.1843	.1575	.1322	.1084	.0857	.0642	.0438	.0242	.0055	42
43	.2758	.2427	.2124	.1838	.1571	.1318	.1080	.0854	.0639	.0434	.0239	.0052	43
44	.2753	.2422	.2119	.1834	.1566	.1314	.1076	.0850	.0635	.0431	.0236	.0049	44
45	.2747	.2417	.2114	.1829	.1561	.1310	.1072	.0846	.0632	.0428	.0232	.0046	45
46	.2741	.2412	.2109	.1825	.1558	.1306	.1068	.0843	.0628	.0424	.0229	.0042	46
47	.2736	.2407	.2104	.1820	.1553	.1302	.1064	.0839	.0625	.0421	.0226	.0039	47
48	.2730	.2403	.2099	.1816	.1549	.1298	.1061	.0835	.0622	.0418	.0223	.0036	48
49	.2724	.2398	.2095	.1811	.1545	.1294	.1057	.0832	.0618	.0414	.0220	.0033	49
50	.2719	.2393	.2091	.1806	.1540	.1291	.1053	.0828	.0615	.0411	.0216	.0030	50
51	.2713	.2388	.2085	.1802	.1536	.1286	.1049	.0825	.0611	.0408	.0213	.0027	51
52	.2707	.2383	.2080	.1797	.1532	.1282	.1045	.0821	.0603	.0404	.0210	.0024	52
53	.2702	.2377	.2075	.1793	.1528	.1278	.1041	.0817	.0601	.0401	.0207	.0021	53
54	.2696	.2372	.2070	.1788	.1523	.1274	.1038	.0814	.0601	.0398	.0204	.0018	54
55	.2691	.2367	.2065	.1784	.1519	.1270	.1034	.0810	.0597	.0394	.0201	.0015	55
56	.2685	.2362	.2061	.1779	.1515	.1266	.1030	.0806	.0594	.0391	.0197	.0012	56
57	.2679	.2356	.2056	.1774	.1510	.1261	.1026	.0803	.0590	.0388	.0194	.0009	57
58	.2674	.2351	.2051	.1770	.1506	.1257	.1022	.0799	.0587	.0384	.0191	.0006	58
59	.2668	.2346	.2046	.1765	.1502	.1253	.1018	.0795	.0583	.0381	.0188	.0003	59

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