

Ὀλύμπια Δώματα

O R, A N

ALMANACK

For the YEAR of

Our LORD GOD, 1802;

Being the Sixth after

BISSEXTILE, or LEAP-YEAR,

And the Second Year of the Nineteenth Century.

And from the World's Creation, 5806.

Wherein are Contained the Lunations, Conjunctions, Aspects, and Effects of the Planets; the Increase, Decrease, and Length of the Days and Nights; with the Rising, Southing, and Setting of the Planets and fixed Stars throughout the Year; whereby may be known the exact Hour of the Night at all Times, when either the Moon or Stars are seen.

Calculated according to Art, and referred to the Horizon of the ancient and renowned Borough Town of *Stamford* (formerly a famous University) whose Latitude is 52 Deg. 20 Min. fitting all the middle Counties of ENGLAND, and, without sensible Error, the whole Kingdom.

Non est e Terris mollis ad Astra Via

By TYCHO WING, Philomath.

L O N D O N :

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[Price, stitched, SEVENTEEN-PENCE.]

Common NOTES and Moveable FEASTS.

Dominical Letter	-	C	Septuagesima Sund.	Feb. 14
Golden Number	-	17	Shrove Sunday	Feb. 28
Epaet	-	26	Easter Day	April 18
Cycle of the Sun	-	19	Whit-Sunday	June 6
Roman Indiction	-	5	Trinity Sunday	June 13
Number of Direction	-	28	Advent Sunday	Nov. 28

A CATALOGUE of the Most Reverend, Right Reverend, and Reverend, the Archbishops, Bishops, and Deans, exercising Ecclesiastical Jurisdiction in England, 1802.

<i>Archbishops.</i>	<i>Deans Names.</i>	<i>Sees Names.</i>
Dr. John Moore	Dr. Tho. Powys	Canterbury
Dr. Wm. Markham	Dr. John Fountayne	York
<i>Bishops.</i>		
Dr. Beilby Porteus	Bishop Pretyman	London
Hon. Dr. S. Barrington	Bishop Cornwallis	Durham
Hon. Dr. Br. North	Dr. Newton Ogle	Winchester
Dr. Charles Mofs	Dr. Geo. Wm. Lukin	Bath & Wells
Hon. Dr. James Yorke	Dr. Wm. Pearce	Ely
Dr. Richard Hurd	Dr. Arthur Onflow	Worcester
Dr. John Butler	Dr. Nat. Wetherell	Hereford
Hon. Dr. J. Cornwallis	Dr. Baptist Proby	Litchf. & Cov.
Dr. Lewis Bagot	Dr. W. D. Shipley	St. Asaph
Dr. Richard Watfon	Dr. Rob. Price, Prec.	Landaff
Dr. Geo. Pretyman	Dr. Sir Rich. Kaye, Bt.	Lincoln
Dr. John Douglas	Dr. John Ekins	Salisbury
Dr. William Cleaver	Mr. John Warren	Bangor
Dr. Samuel Horsley	Dr. Thomas Dampier	Rocheſter
Dr. Richard Beadon	Dr. John Luxmore	Glouceſter
Hon. Dr. E. V. Vernon	Dr. Isaac Milner	Carlisle
Hon. Dr. C. M. Sutton	Dr. Joſeph Turner	Norwich
Dr. Spencer Madan	Dr. Tho. Kipling	Peterborough
Lord Geo. Murray	Mr. Wollaſton, Prec.	St. David's
Dr. Regin. Courtenay	Dr. Charles Harward	Exeter
Dr. F. H. W. Cornwall	Dr. C. Peter Layard	Bristol
Dr. John Buckner	Mr. Combe Miller	Chicheſter
Dr. John Randolph	Dr. Cyril Jackson	Oxford
Dr. H. W. Majendie	Dr. George Cotton	Cheſter
	Biſhop Horſley	Westminſter
	Biſhop Sutton	Windſor
Mr. Claudius Crigan		Sodor & Man

A TABLE of TERMS and Returns for the Year 1802.

HILARY Term begins January 23, ends February 12.

Returns or Effoign Days.

		Exc.	Ret.	App.	W. D.
In eight Days of St. Hilary	Jan. 20	21	22	23	Satur.
In fifteen Days of St. Hilary	27	28	29	30	Satur.
On the Mor. of the Purif. of the Bl. V. M.	Feb. 3	4	5	6	Satur.
In eight Days of the Purif. of the Bl. V. M.	9	10	11	12	Friday

EASTER Term begins May 5, ends May 31.

In fifteen Days of Easter	May 2	3	4	5	Wedn.
From Easter Day in three Weeks	9	10	11	12	Wedn.
From Easter Day in one Month	16	17	18	19	Wedn.
From Easter Day in five Weeks	23	24	25	26	Wedn.
On the Mor. of the Ascension of the Lord	28	29	30	31	Mond.

TRINITY Term begins June 18, ends July 7.

On the Morrow of the Holy Trinity	June 14	15	16	18	Friday
In eight Days of the Holy Trinity	20	21	22	23	Wedn.
In fifteen Days of the Holy Trinity	27	28	29	30	Wedn.
From the Day of the Holy Trinity in 3 W.	July 4	5	6	7	Wedn.

MICHAELMAS Term begins November 6, ends November 28.

On the Morrow of All Souls	Nov. 3	4	5	6	Saturd.
On the Morrow of St. Martin	12	13	14	16	Tuefd.
In eight Days of St. Martin	18	19	20	21	Mond.
In fifteen Days of S. Martin	25	26	27	28	Mond.

N. B. No Sittings in Westminster-Hall on the Second of February, Ascension-day, and Midsummer-day.

The Exchequer opens eight Days before any Term begins, except Trinity, before which it opens but Four Days.

Note, The first and last Days of every Term, are the first and last Days of Appearance.

The Names of the Learned JUDGES in the Law.

I. Right Hon. Lord Eldon, Lord High Chancellor of Great Britain.

Right Hon. Sir William Grant, Knt. Master of the Rolls.

II. In the { Rt. Hon. Lord Kenyon, Lord C. J. Sir Nash Grose, Knt.
K. Bench. } Sir Soulden Lawrence, Kt. Sir Simon Le Blanc, Knt.

III. In the { Right Hon. Lord Alvanley, L.C. J. Sir Giles Rooke, Knt.
Co. Pleas. } John Heath, Esq. Sir Alan Chamber, Kt.

IV. In the { Sir Arch. McDonald, Knt. L. C. B. Sir Alex. Thompson, Kt.
Exchequer. } Sir Beaumont Hotham, Knt. Sir Robert Graham, Knt.

Sir Edward Law, Knt. Attor. Gen. Hon. Spences Percival, Solic. Gen.

The REGAL Table.

The Year, Month, and Day, when each King and Queen began to reign, accounting the Year to be- gin <i>January 1.</i>				Length of each Reign.			Number of Years expired since their Reigns ended.	
Kings Names	began to reign			Y.	M.	D.	end	Kings Names
William I.	1066	Oct.	14	20	10	26	715	William 1
William II.	1087	Sept.	9	12	10	24	702	William 2
Henry I.	1100	Aug.	2	35	3	29	667	Henry 1
Stephen	1135	Dec.	1	18	10	24	648	Stephen
Henry II.	1154	Oct.	25	34	8	11	613	Henry 2
Richard I.	1189	July	6	9	9	0	603	Richard 1
John	1199	April	6	17	6	13	586	John
Henry III.	1216	Oct.	19	56	0	28	530	Henry 3
Edward I.	1272	Nov.	16	34	7	21	495	Edward 1
Edward II.	1307	July	7	19	6	18	475	Edward 2
Edward III.	1327	Jan.	25	50	4	27	425	Edward 3
Richard II.	1377	June	21	22	3	8	403	Richard 2
Henry IV.	1399	Sept.	29	13	5	20	389	Henry 4
Henry V.	1413	Mar.	20	9	5	11	380	Henry 5
Henry VI.	1422	Aug.	31	38	6	4	341	Henry 6
Edward IV.	1461	Mar.	4	22	1	5	319	Edward 4
Edward V.	1483	April	9	0	2	13	319	Edward 5
Richard III.	1483	June	22	2	2	0	317	Richard 3
Henry VII.	1485	Aug.	22	23	8	0	293	Henry 7
Henry VIII.	1509	April	22	37	9	6	255	Henry 8
Edward VI.	1547	Jan.	28	6	5	8	249	Edward 6
Q. Mary I.	1553	July	6	5	4	11	244	Q. Mary
Q. Elizabeth	1558	Nov.	17	44	4	7	195	Q. Elizabeth
James I.	1603	Mar.	24	22	0	3	177	James 1
Charles I.	1625	Mar.	27	23	10	3	153	Charles 1
Charles II.	1649	Jan.	30	36	0	7	117	Charles 2
James II.	1685	Feb.	6	4	0	7	113	James 2
Will. 3. & M.	1689	Feb.	13	13	0	23	100	William 3
Q. Anne	1702	Mar.	8	12	4	24	88	Q. Anne
George I.	1714	Aug.	1	12	10	10	75	K. George 1
George II.	1727	June	11	33	4	14	42	K. George 2
George III.	1760	Oct.	25	Crowned Sept. 22, 1761.				

The Use of the following TABLE of the Moon's Southing, to find the Time of High-Water, and the Hour of the Night.

I. To find the Time of High-Water in most Parts of
E N G L A N D.

Take the Time of the Moon's Southing for the Day proposed, and to that add the Hours and Minutes which stand against the Place required in the following Table of Sea-Coasts, and the Sum will be the Time of High-Water at the Place required on that Day.

A Table of the Sea Coasts.

	H.	M.
Portsmouth, Queenborough, Southampton,	0	00
Rochester, Winchelsea, Flushing,	0	45
Downs, Gravesend, Ramkins, Guernsey,	1	30
Denbeigh, Bell-Isle, Holy-Isle, Downs-Road,	2	15
London, Tinnmouth, Whitby, Hartlepool,	3	00
Scarborough, Berwick, Flushing, Staples,	3	45
Flamborough, Humber, Bridlington-Bay,	4	30
Plymouth, Ramsay, Newcastle, Severn,	5	15
Lynn, Fosdyke, Hull, Weymouth, Dartmouth, Cross-Keys,	6	00
Boston, Start-Point, Foulness, Bristol-Key,	6	45
Bridgewater, Milford Haven, Lizard, Wintertown,	7	30
Yarmouth, Isle of Wight, the Needles,	8	15
Isle of Man, Orkney, Pool, South-Foreland,	9	10
Dover, Harwich, Orfordness, Bullein,	10	10
Rye, Solebay, Margate-Road,	11	15

II. To find the Hour of the Night by the Shadow of the Moon on a Sun-Dial.

1. When the Shadow falls precisely on the Hour 12, then the Time of the Moon's Southing, found in the preceding Table, is the exact Time of Night. But in other Cases,

2. If the Shadow wants of 12, see how much it wants of it; which Time, subtracted from that of the Moon's Southing, leaves the Time of Night. *Note*, You must add 12 Hours to the Moon's Southing, if Need be.

3. If the Shadow has past 12, add the Time that it has past it to the Time of the Moon's Southing; the Sum will be the Time of Night required; abating 12 Hours from that Sum, if Need be.

A TABLE of the MOON'S SOUTHING, of excellent Use to

M	January		February		March		April		May		June		M
D	h	m	h	m	h	m	h	m	h	m	h	m	D
1	9	m	0	10	m	44	9	m	29	11	m	1	1
2	10		1	11		48	10		28	11		50	2
3	11		6	0	a	46	11		24	0	a	40	3
4	0	a	13	1		39	0	a	16	1		31	4
5	1		17	2		29	1		7	2		24	5
6	2		10	3		17	1		56	3		19	6
7	3		10	4		5	2		46	4		14	7
8	3		59	4		53	3		37	5		5	8
9	4		46	5		43	4		29	6		2	9
10	5		32	6		34	5		23	6		52	10
11	6		17	7		27	6		17	7		39	11
12	7		4	8		19	7		10	8		22	12
13	7		53	9		11	8		1	9		4	13
14	8		44	10		1	8		49	9		45	14
15	9		36	10		48	9		35	10		25	15
16	10		28	11		32	10		18	11		7	16
17	11		19	morn		10	59		11	51		morn	17
18	morn		0	15		11	40		morn	0		17	18
19	0		8	0		55	morn		0	38		1	19
20	0		54	1		35	0		21	1		29	20
21	1		37	2		15	1		2	24		3	21
22	2		18	2		57	1		46	3		23	22
23	2		58	3		42	2		34	4		24	23
24	3		37	4		30	3		26	5		25	24
25	4		17	5		23	4		22	6		23	25
26	5		0	6		21	5		21	7		18	26
27	5		4	7		22	6		23	8		10	27
28	6		36	8		26	7		24	8		59	28
29	7		33			8	22		9	47		10	29
30	8		34			9	18		10	36		11	30
31	9		40			10	10		11	55			31

Spring Quarter begins - March 21d 7h 35m morning.
 Summer Quarter begins - June 22 5 27 morning.
 Autumn Quarter begins - Sept. 23 7 8 afternoon.
 Winter Quarter begins - Dec. 22 11 51 morning.

The Moon's Southing.

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find the Time of High-Water, and the Hour of the Night.

M	July		August		September		October		November		December		M
D	h	m	h	m	h	m	h	m	h	m	h	m	D
1	1	a 16	2	a 5	2	a 50	3	a 20	5	a 12	5	a 42	1
2	2	4	2	44	3	34	4	15	6	7	6	31	2
3	2	48	3	23	4	22	5	13	7	0	7	18	3
4	3	29	4	3	5	15	6	13	7	51	8	5	4
5	4	8	4	46	6	12	7	12	8	40	8	55	5
6	4	47	5	32	7	13	8	9	9	29	9	47	6
7	5	27	6	23	8	14	9	3	10	19	10	42	7
8	6	8	7	19	9	15	9	56	11	11	11	39	8
9	6	53	8	19	10	13	10	47	morn		morn		9
10	7	42	9	22	11	9	11	38	0	6	0	37	10
11	8	36	10	26	morn		morn		1	4	1	34	11
12	9	35	11	26	0	1	0	30	2	2	2	27	12
13	10	39	morn		0	53	1	25	3	1	3	16	13
14	11	43	0	24	1	45	2	21	3	56	4	1	14
15	morn		1	18	2	37	3	19	4	47	4	44	15
16	0	45	2	9	3	32	4	17	5	34	5	23	16
17	1	43	2	59	4	27	5	13	6	18	6	2	17
18	2	38	3	49	5	24	6	6	6	59	6	41	18
19	3	28	4	40	6	20	6	55	7	38	7	21	19
20	4	17	5	33	7	13	7	40	8	18	8	3	20
21	5	4	6	28	8	4	8	23	8	57	8	50	21
22	5	53	7	23	8	52	9	3	9	38	9	41	22
23	6	43	8	17	9	36	9	42	10	23	10	37	23
24	7	35	9	9	10	18	10	22	11	12	11	36	24
25	8	29	9	59	10	58	11	3	0 a	5	0 a	37	25
26	9	23	10	45	11	37	11	46	1	2	1	36	26
27	10	17	11	29	0 a	17	0 a	32	2	1	2	33	27
28	11	9	0 a	19	0 a	59	1	22	3	1	3	26	28
29	11	57	0	49	1	42	2	16	3	58	4	16	29
30	0 a	43	1	28	2	29	3	14	4	52	5	3	30
31	1	25	2	8			4	12			5	50	31

VENUS is a Morning Star till March 17; and then an Evening Star for the rest of the Year.

JUPITER is an Evening Star till September 9; then a Morning Star for the rest of the Year.

Lunations.			M D	Jupiter rises	Venus rises
New Moon	4th day, at	8 morning	1	8 a 46	6 m 44
First Quarter	10th day, at	midnight	7	8 17	6 53
Full Moon	18th day, at	10 night	13	7 49	7 3
Last Quarter	27th day, at	1 morning	19	7 21	7 7
			25	6 53	7 7

M D	W D	Holy Days, ☉ rises & sets	D's Longit.	D's Declin.	D rises & sets	Aspects and Weather
1	F	Circumcision	1 f 16	24 s 59	5 m 13	The year begins with frost and snow.
2	S	☉ rises 8h 4m	15 45	27 40	6 36	
3	C	2 S. aft. Chri.	0 h 39	28 27	7 52	
4	M		15 48	27 9	D sets	
5	Tu	☉ sets 3h 58m	1 m 2	23 50	5 a 15	
6	W	Epiphany	16 10	18 54	6 51	<i>Twel. d: OldCb.</i>
7	Th		1 X 3	12 53	8 24	Cold and windy,
8	F	Lucian	15 35	6 17	9 50	△ h ♀, △ 4 ♀
9	S	☉ rises 7h 58m	29 42	0 n 26	11 15	else not bad
10	C	1 S. aft. Epiph.	13 v 24	6 57	morn	
11	M	Plough Monday	26 44	12 58	0. 35	△ 4 ♀
12	Tu		9 8 43	18 16	1 53	△ h ♀
13	W	Hil: Ca. Te b.	22 25	22 38	3 14	<i>Old New Yr's d.</i>
14	Th	Oxf. T. begins	4 II 54	25 53	4 33	weather.
15	F		17 12	27 53	5 43	
16	S	☉ sets 4h 10m	29 21	28 30	6 45	Foggy mists now about.
17	C	2 S. aft. Epiph.	11 23	27 45	7 32	
18	M	Q. Ch. b. day k.	23 20	25 44	D rises	
19	Tu	<i>[Prisca]</i>	5 Ω 13	22 35	4 a 41	
20	W	Fabian	17 3	18 31	5 52	Rough weather
21	Th	Agnes	28 52	13 45	7 5	
22	F	Vincent	10 m 42	8 27	8 15	△ 4 ♂
23	S	Hil. T. begins	22 38	2 50	9 26	now about.
24	C	3 S. aft. Epiph.	4 42	2 s 57	10 38	△ h ♂
25	M	Con. St. Paul.	16 58	8 43	11 52	
26	Tu		29 32	14 18	morn	Snow or cold
27	W	Pr. Au. Fred. b.	12 m 28	19 25	1 10	
28	Th	☉ rises 7h 23m	25 50	23 45	2 33	
29	F	☉ sets 4h 29m	9 f 40	26 55	3 58	rains.
30	S	K. Ch. T. mar.	23 59	28 29	5 16	
31	C	4 S. aft. Epiph.	8 v 45	28 6	6 25	

M D	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	7 ^m 18	10 n 27	5 ^m 39	10 n 29	18 55	23 s 21	22 14	22 s 46
7	7 6	10 32	5 23	10 36	23 19	23 42	29 45	23 15
13	6 52	10 39	5 10	10 45	27 43	23 55	7 17	23 18
19	6 34	10 47	4 32	10 58	2 10	23 5	17 49	22 56
25	6 13	10 56	3 58	11 11	6 37	23 54	22 20	22 8

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

Observations

Seven stars south at 36m. past 8 at night
Day increased 11 minutes

☿ in perigeo, nearest the earth

Capella south 38m. past 9 at night

Seven stars south at 8 at night

Moon eclipses the star Eta, one of the
Pleiades, at 30 m. past 9 at night
Saturn rises near 8 at night
Day breaks at 49 min. past 5 o'clock

☿ in apogeo, farthest from the earth
Sun enters ♊ 27m. past 4 afternoon
Moon eclipses Jupiter at 9 at night

Day increased 54m.
Day 8 hours 42 minutes long

Mars rises at 6 in the morning
Mercury rises at 8 in the morning

Aldebaran south 32m. after 7 at night

Lunations.			M D	Jupiter rises	Venus rises
New Moon	2d day, at	7 night	1	6 a 19	7 m 12
First Quarter	9th day, at	2 afternoon	7	5 51	7 2
Full Moon	17th day, at	5 afternoon	13	5 23	6 57
Last Quarter	25th day, at	2 afternoon	19	4 55	6 50
			25	4 28	6 49

M D	W D	Holy Days, ☉ rises & sets	D's Longit.	D's Declin.	D rises & sets	Aspects and Weather
1	M		23 18 50	25 s 39	7 m 12	February begins with seasonable weather.
2	Tu	Pur. or Candle	9 37 7	21 21	D sets	
3	W	Blaise	24 23	15 36	5 a 41	
4	Th		9 30	8 59	7 15	
5	F	Agatha	24 17	2 0	8 42	Cold winds blow, and the
6	S		8 29	4 n 5	10 7	
7	☉	5 S. aft. Epiph.	22 35	11 20	11 31	
8	M	☉ rises 7h 14m	6 8 3	17 2	morn	
9	Tu		19 7	21 47	0 54	8 ☿ ♄ weather very variable.
10	W	☉ sets 4h 50m	1 11 49	25 23	2 13	
11	Th		14 14	27 41	3 29	
12	F	Hilary Ter. e.	26 25	28 37	4 35	
13	S		8 26	28 10	5 20	Frosty
14	☉	Septuages. Su	20 21	26 25	6 7	
15	M	[Valen: O. Can.]	2 12 23	31 6	33	
16	Tu		14 2	19 38	6 53	
17	W	☉ rises 6h 57m	25 52	14 59	D rises	8 ☉ ♄ and more fair.
18	Th		7 45	9 46	5 a 59	
19	F	☉ sets 5h 7m	19 42	4 10	7 14	
20	S		1 46	1 s 38	8 25	
21	☉	Sexagesima S.	13 59	7 27	9 40	Frost and snow 8 ☉ ♄ now about.
22	M	☉ rises 6h 48m	26 23	13 4	10 57	
23	Tu	[Ad. Fr. b.]	9 m 2	18 16	morn	
24	W	St. Matthi: Pr.	21 55	22 4	0 18	
25	Th	Ca. T. d. m.	5 17	26 13	1 40	8 ♄ ♀
26	F		18 58	28 16	3 2	
27	S	☉ sets 5h 22m	3 28	28 35	4 12	
28	☉	Quin. or Shr. S.	17 29	27 0	5 5	

M	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	5 ^m 45	11 n 7	3 ^m 12	11 n 29	11 ^m 51	23 s 37	1 ^m 7	20 s 41
7	5 19	11 18	2 29	11 4	16 22	23 12	8 38	19 2
13	4 51	11 29	1 43	12 3	20 53	22 39	16 9	17 5
19	4 22	11 40	0 56	12 20	25 26	21 50	23 39	14 50
25	3 53	11 51	0 9	12 38	29 59	21 5	1 X 9	12 20

D	☉'s		☉'s	Observations
	Longit.	Declin.		
1	12 ^m	0	17 s 13	Day breaks at 30m. past 5 o'clock ☽ in perigeo, and nearest the earth
2	13	1	16 56	
3	14	2	16 38	
4	15	3	16 20	Day 9 hours 28 minutes long
5	16	4	16 2	
6	17	4	15 44	
C	18	5	15 26	Night 14 hours 28 minutes long Days have increased 1h. 49m. Saturn rises about 6 at night Jupiter rises half past 5 at night
8	19	6	15 7	
9	20	7	14 48	
10	21	7	14 28	☽ in apogeo, farthest from the earth Moon eclipses Jupiter at 9 at night
11	22	8	14 9	
12	23	9	13 49	
13	24	9	13 29	Sun enters X. 14m. past 7 morning Jupiter and Saturn are in opposition to the Sun, and shines gloriously all night
C	25	10	13 9	
15	26	10	12 49	
16	27	11	12 28	Mercury at his greatest elongation from the Sun as seen from the earth
17	28	11	12 7	
18	29	12	11 46	
19	0 X	12	11	The Great Dog Star, south at 8 at night
20	1	12	11 3	
C	2	13	10 42	
22	3	13	10 20	
23	4	13	9 58	
24	5	14	9 36	
25	6	14	9 14	
26	7	14	8 52	
27	8	14	8 29	
C	9	15	8 7	

Lunations.				M D	Jupiter sets	Venus rises
New Moon	4th day, at	5 morning		1	6m 34	6 m40
First Quarter	11th day, at	6 morning		7	6 9	6 28
Full Moon	19th day, at	11 morning		13	5 45	6 19
Last Quarter	26th day, at	11 night		19	5 22	6 9
				25	5 1	5 58

M D	W D	Holy Days, Orises & sets	D's Longit.	D's Declin.	D rises & sets	Aspects and Weather
1	M	David { Chad	2 ∞ 16	23 s 32	5 m44	Stormy weather,
2	Tu	Shrove Tued.	17 16	18 27	6 8	
3	W	Ash Wednesd.	2 X 21	12 12	6 26	☉ eclips. invis.
4	Th		17 23	5 16	D sets	fleet or showers.
5	F	☉ rises 6h 26m	2 V 12	1 n 51	7 a 37	
6	S		16 41	8 43	9 4	
7	C	1 Sun. in Lent	0 8 47	14 58	10 32	Moderate weather
8	M	[Perpetua	14 25	20 16	11 58	
9	Tu	☉ sets 5h 42m	27 37	24 24	morn	now about.
10	W	Emb. Week	10 II 26	27 12	1 18	
11	Th		22 53	28 34	2 29	
12	F	Gregory	5 ∞ 5	28 30	3 28	♂ ☉ ♀, ♂ ♀ ♀
13	S		17 4	27 5	4 11	Brisk winds,
14	C	2 Sun. in Lent	28 56	24 28	4 41	
15	M	☉ rises 6h 6m	10 Ω 45	20 50	5 4	and stormy
16	Tu		22 34	16 22	5 21	
17	W	St. Patrick	4 ∞ 27	11 16	5 34	weather.
18	Th	Edw. K. W. S.	16 26	5 43	5 46	D eclipsed invi.
19	F		28 33	0 s 5	D rises	
20	S	☉ sets 6h 4m	10 Δ 50	5 59	7 a 38	♂ ☉ ♀
21	C	3 Sun. in Lent	23 19	11 43	8 51	No great alteration.
22	M	[Benedict	6 m 0	17 5	10 11	
23	Tu		18 55	21 47	11 35	
24	W		2 † 5	25 30	morn	
25	Th	Annu. Ladyday	15 29	27 54	0 58	Fine and
26	F		29 10	28 41	2 8	
27	S	☉ rises 5h 42m	13 ♀ 6	27 40	3 8	pleasant weather
28	C	4 or Midl. Sun.	27 18	24 52	3 50	
29	M		11 ∞ 42	20 29	4 17	to the end.
30	Tu	☉ sets 6h 23m	26 17	14 49	4 37	
31	W		10 X 58	8 17	4 53	

M D	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	3 ^h 34 ^m	11 n 58	29 Ω 38	12 n 49	3 $\sim$ 2	20 s 27	6 $\times$ 9	10 s 34
7	3 6	12 9	28 53	13 4	7 37	19 23	13 38	7 46
13	2 39	12 19	28 12	13 19	12 12	18 12	21 7	4 50
19	2 13	12 28	27 34	13 32	16 48	16 55	28 35	1 50
25	1 50	12 36	27 1	13 43	21 25	15 31	6 ∇ 2	1 n 12

M D	☉'s Longit.	☉'s Declin.	Observations
1	10 $\times$ 15	7 s 44	
2	11 15	7 21	Mercury stationary, as seen from the earth
3	12 15	6 58	D in perigeo, nearest the earth
4	13 15	6 35	Mars rises 15m past 5 in the morning
5	14 15	6 12	Mercury sets soon after 7 at night
6	15 15	5 49	
C 16	15 5	5 26	
8	17 15	5 2	
9	18 15	4 39	Day breaks 26m. past 4 o'clock
10	19 15	4 16	
11	20 15	3 52	Twilight ends 39m. past 7 o'clock
12	21 15	3 29	
13	22 14	3 5	
C 23	14 2	4 1	
15	24 14	2 18	D in apogeo, farthest from the earth
16	25 13	1 54	Days have increased 4h. 13m.
17	26 13	1 30	
18	27 12	1 7	
19	28 12	0 43	Saturn sets 36m. past 5 in the morning
20	29 11	0 19	
C 0 ∇ 11	0 n 4		Sun enters ∇ at 35m. past 7 morning
22	1 10	0 28	
23	2 10	0 52	Mars rises 44m. past 4 in the morning
24	3 9	1 15	Venus rises at 6 in the morning
25	4 9	1 39	
26	5 8	2 2	Mercury stationary, as seen from the earth
27	6 7	2 26	Mercury rises at 5 in the morning
C 7	6 2	49	
29	8 6	3 13	Twilight ends 20 m. past 8 o'clock
30	9 5	3 36	
31	10 4	3 50	D in perigeo, nearest to the earth

Lunations.			M D	Jupiter sets	Venus sets
New Moon	2d day, at	3 afternoon	1	4 m 35	6 a 42
First Quarter	9th day, at	midnight	7	4 13	7 4
Full Moon	18th day, at	3 morning	13	3 50	7 25
Last Quarter	25th day, at	6 morning	19	3 28	7 46
			25	3 5	8 6

M	W	Holy Days,	D's	D's	D rises	Aspects and
D	D	Orises & sets	Longit.	Declin.	& sets	Weather
1	Th	Orises 5h 33m	25 X 39	1 s 18	5 m 8	8 4 ♂
2	F		10 Y 13	5 n 41	6 sets	April begins
3	S	Richard [Ambr.	24 33	12 16	8 a 8	pretty fine.
4	C	5 Sun. in Lent	8 8 36	18 5	9 35	
5	M		22 16	22 49	11 c	Some showers,
6	Tu	Old Lady Day	5 II 32	26 14	morn	
7	W	Orises 6h 39m	18 25	28 11	0 19	8 2 ♂
8	Th		0 III 57	28 37	1 24	perhaps thunder.
9	F	Cam. T. ends	13 11	27 37	2 15	
10	S	Oxf. T. ends	25 12	25 21	2 52	Δ 4 ♀
11	C	Palm Sunday	7 Ω 5	22 0	3 17	Good spring
12	M		18 53	17 47	3 36	
13	Tu	Orises 5h 9m	0 IV 44	12 52	3 50	
14	W		12 30	7 28	4 1	Δ 2 ♀
15	Th	Maundy Thursday	24 45	1 43	4 12	weather.
16	F	Good Friday	7 V 3	4 s 10	4 22	Δ ☉ 4
17	S	Orises 6h 58m	19 35	10 1	4 33	
18	C	Easter Day	2 m 23	15 35	D rises	Some what
19	M	Easter Monday	15 26	20 33	9 a 25	Allege
20	Tu	Easter Tuesday	28 45	24 36	10 50	windy.
21	W		12 f 16	27 22	morn	
22	Th	Orises 4h 52m	25 59	28 32	0 9	Δ ☉ 2
23	F	St. George	9 f 51	27 56	1 12	Cold, and perhaps
24	S		23 52	25 34	1 57	
25	C	Low S: St. Mar:	7 III 58	21 37	2 28	some frosts.
26	M	[Pis. Mary b.	22 9	16 25	2 50	
27	Tu		6 X 23	10 17	3 7	
28	W	Oxf. & Ca. T. b.	20 38	3 38	3 21	* ♂ ♀
29	Th		4 Y 52	3 n 10	3 37	Some showers.
30	F	Orises 7h 22m	19 1	9 47	3 40	

M D	Saturn		Jupiter		Mars		Venus	
	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.	Longit.	Declin.
1	♏ 26	12 n 44	♏ 30	13 n 52	♏ 48	13 s 46	♏ 44	4 n 44
7	♏ 9	12 50	♏ 10	13 59	♏ 25	12 12	♏ 10	7 42
13	♏ 55	12 54	♏ 56	14 3	♏ 6	10 33	♏ 35	10 33
19	♏ 45	12 58	♏ 49	14 4	♏ 10	8 51	♏ 8	13 16
25	♏ 38	12 59	♏ 49	14 4	♏ 15	7 14	♏ 24	15 47

M D	☉'s Longit.	☉'s Declin.	Observations
1	♏ 3	4 n 23	Days have increased 5 hours 10 min.
2	♏ 2	4 40	Saturn sets at near 5 in the morning
3	♏ 1	5 9	
C 14	♏	5 32	
5	♏ 59	5 55	The Moon among the Seven stars at 10
6	♏ 58	6 17	night, and will eclipse some of them
7	♏ 57	6 40	
8	♏ 56	7 3	Mars rises 12m. past 4 morning
9	♏ 55	7 25	Mercury at his greatest elongation from
10	♏ 54	7 47	the Sun, as seen from the earth
C 20	♏ 53	8 9	
12	♏ 51	8 32	☾ in apogeo, furthest from the earth
13	♏ 50	8 53	Moon eclipses Jupiter 29m. past 2 in
14	♏ 49	9 15	the morning
15	♏ 47	9 37	
16	♏ 46	9 58	
17	♏ 44	10 10	Twilight ends 11m. past 9 at night
C 27	♏ 43	10 40	
19	♏ 41	11 1	
20	♏ 4	11 22	Sun enters 8 15m. past 8 at night
21	♏ 8 38	11 43	Day 14 hours 12m. long
22	♏ 1	12 3	Jupiter stationary, as seen from the earth
23	♏ 2	12 23	
24	♏ 3	12 43	Days have increased 6 hours 39 minutes
C 4	♏ 32	13 3	
26	♏ 5	13 22	
27	♏ 6	13 42	☾ in perigeo, nearest the earth
28	♏ 7	14 1	Saturn sets near 3 in the morning
29	♏ 8	14 20	
30	♏ 9	14 38	

Lunations.				M D	Jupiter sets	Venus sets
New Moon	2d day, at	2 morning		1	2 m 43	8 a 27
First Quarter	9th day, at	7 night		7	2 20	8 47
Full Moon	17th day, at	3 afternoon		13	1 57	9 5
Last Quarter	24th day, at	11 morning		19	1 3	9 22
New Moon	31st day, at	1 afternoon		25	1 11	9 35

M D	W D	Holy Days, Orises & sets	D's Longit.	D's Declin.	D rises & sets	Aspects and Weather
1	S	St. Phil. & Jam.	3 8 0	15 n 50	3 m 59	Cold and cloudy,
2	C	2 S. aft. Easter	10 47	21 0	D sets	with showers of
3	M	Inven. of Cross	0 11 16	24 57	9 a 56	△ 4 ♀
4	Tu		13 27	27 29	11 14	□ 4 ♀
5	W	Easter Term b.	26 17	28 28	morn	△ 4 ♀
6	Th	Jobn Ev. a. P. L.	8 25 49	27 58	0 11	rain.
7	F		21 3	26 5	0 55	
8	S	Orises 4h 24m	3 2 4	23 3	1 24	□ 4 ♀
9	C	3 S. aft. Easter	14 57	19 5	1 44	Fine weather,
10	M		26 46	14 24	2 0	
11	Tu	Orises 7h 41m	8 m 37	9 11	2 13	though rather
12	W		20 35	3 35	2 24	cool.
13	Th	Old May day	2 2 45	2 s 14	2 34	
14	F		15 11	8 5	2 43	
15	S	Orises 4h 13m	27 56	13 45	2 55	Brisk winds
16	C	4 Sun. af. East.	11 m 1	18 58	3 9	with showers
17	M	Prs. Wales b.	24 26	23 22	D rises	
18	Tu	Orises 7h 51m	8 4 9	20 36	9 a 54	□ 4, 6 4 ♀. □
19	W	Queen Cha. b.	22 7	28 15	11 3	□ 4 ♀ 14 ♀
20	Th	[Dunstan	6 15 16	28 6	11 57	of rain.
21	F	Orises 4h 5m	20 29	26 6	morn	* 4 ♀
22	S	Prs. Eliz. born	4 44	22 26	0 32	□ 4 ♀
23	C	Rogation Sun.	18 58	17 28	0 57	St rmy, perhaps
24	M	Orises 7h 59m	3 7 11	33 1	14	thunder.
25	Tu		17 11	5 6	1 29	
26	W	Augustin Abp.	1 9	1 n 33	1 40	
27	Th	Ascen: H. Thu.	15 0	8 4	1 53	Fair and dry,
28	F	[Ven. Bede	28 44	14 9	2 7	
29	S	King Ch. 2 re.	12 8 19	19 28	2 21	a the end.
30	C	Sun. aft. Ascen.	25 42	23 44	2 41	* 4 ♀
31	M	East. Ter. ends	8 11 3	26 42	D sets	

D	Saturn		Jupiter		Mars		Venus	
M	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	0 ^m 35	13 n 0	25 55	14 n 1	19 50	5 21	21 8 47	18 n 4
7	0 36	12 59	26 8	13 55	24 25	3 33	20 10 20	4
13	0 41	12 56	26 27	13 48	28 59	1 45	6 11 31	21 44
19	0 49	12 53	26 53	13 39	30 32	0 n 3	13 52	23 3
25	1 1	12 48	27 23	13 27	8 31	50	21 13	23 58

D	Sun's		Sun's		Observations
M	Longit.	Declin.	Longit.	Declin.	
1	10 8 21	14 n 57			
C	11 19 15	15			
3	12 18 15	33			Saturn stationary, as seen from the earth, and sets soon after 2 in the morning.
4	13 16 15	50			
5	14 14 16	8			
6	15 12 16	25			
7	16 10 16	42			Mercury rises 10 min. past 4 in the morn.
8	17 8 16	58			Day break 41 min. past 1 o'clock.
C	18 6 17	14			D in Apogeo, furthest from the earth.
10	19 4 17	30			
11	20 2 17	46			Virgin's spike south at 10 at night.
12	20 59 18	1			
13	21 57 18	17			
14	22 55 18	31			Day increased 7 hours 48 minutes.
15	23 53 18	46			Saturn sets at 2 in the morning.
C	24 51 19	0			
17	25 48 19	14			Moon eclipses a small star 32 min. past 9 at night.
18	26 46 19	27			
19	27 44 19	41			
20	28 41 19	53			Mars rises 27 min. past 2 in the morn.
21	29 39 20	6			Sun enters II 47 min. past 8 at night.
22	0 II 37 20	18			D in Perigeo, nearest the earth.
C	1 34 20	30			
24	2 32 20	41			Mercury rises 8 min. past 4 in morning.
25	3 29 20	53			Day 16 hours long.
26	4 27 21	3			
27	5 24 21	14			Venus shines late at night.
28	6 22 21	24			
29	7 20 21	33			Sun due east 13 min. past 7 o'clock.
C	8 17 21	43			
31	9 15 21	52			

Lunations						M D	Jupiter sets	Venus sets
First Quarter 8th day, at 1 afternoon.						1	om 39	9 a 50
Full Moon 15th day, at midnight.						7	o 16	9 57
Last Quarter 22d day, at 4 afternoon.						13	11 a 53	10 1
New Moon 30th day, at 1 morning.						19	11 30	10 1
						25	11 7	9 59
M D	W D	Holy-Days ☉ rises & sets	Moon's Longit.	Moon's Declin.	☽ rises & sets	Aspects and Weather		
1	T	Nicomede	21 11 48	28 n 12	9 a 59			
2	W	☉ rises 3 52	4 28 28	10 10	48	* ♀, * ♀		
3	T	Ox. T. e. C. T. d.	16 53 26	41 11	22	Fair and hot		
4	F	K. Geo. 3 b.	29 3 23	59 11	45	* ♀		
5	S	D. of Cumb. b.	11 Ω 2 20	16	morn	about this		
6	C	Whit-Sund.	22 53 15	47 o	3	time.		
7	M	Whit-Mond.	4 m 42 10	44 o	16			
8	T	Whit-T. of 1.	16 32 5	17 o	28			
9	W	Ember Week	28 30 o s	25 o	38	Cloudy and		
10	T		10 41 6	11 o	48	♂ ♀ more		
11	F	St. Barnabas	23 10 11	51 o	58	cool, with		
12	S	☉ sets 8 15	6 m 1 17	11 1	10	flying showers.		
13	C	Trinity Sund.	19 17 21	54 1	26			
14	M	☉ rises 3 44	2 1 57 25	35 1	47			
15	T		17 o 27	49	☽ rises	* ☉ ♂		
16	W	Oxford T. be.	1 22 28	17 9 a	46	Cooling gales		
17	T	Alban. Cor. Chr.	15 56 26	48 10	29	of wind.		
18	F	Trin. T. b.	o 35 23	29 10	57			
19	S		15 12 18	41 11	15			
20	C	S. aft. Trin.	29 41 12	50 11	32			
21	M	Lon. d. [Tr. Ed.	14 0 6	22 11	44			
22	T		28 5 o n	19 11	56	* ☉ ♀		
23	W	☉ sets 8 17	11 57 6	52 morn		Fair and hot.		
24	T	Nat. J. Bapt.	25 35 12	59 o	8	* ☉ ♀		
25	F		9 8 1 18	25 o	22	Δ ♀ ♂		
26	S	☉ rises 3 44	22 15 22	52 o	40	Frequent show-		
27	C	S. aft. Trin.	5 11 17 26	6 1	5			
28	M		18 6 27	56 1	38	Δ ♀ ♂ ers		
29	T	St. Peter	o 43 28	18 2	24	□ ♂ ♀		
30	W	☉ sets 8 15	13 8 27	12 sets		at the end.		

D		Saturn		Jupiter		Mars		Venus	
M	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.	
1	1 ^m 20	12 n 40	28 ^Q 6	13 n 12	13 ^V 18	3 n 53	29 II 46	24 n 31	
7	1 40	12 32	28 48	12 56	17 46	5 37	7 [☿] 5	24 31	
13	2 2	12 24	29 34	12 39	22 11	7 18	14 23	24 5	
19	2 28	12 14	om [☿] 25	12 21	26 35	8 55	21 40	23 15	
25	2 57	12 3	1 19	12 1	08 56	10 29	28 56	22 0	

D		Sun's		Observations
M	Longit.	Declin.		
1	10 II 12	22 n 0		
2	11 10	22 8	All day or twilight till July the 23d.	
3	12 7	22 16		
4	13 4	22 24		
5	14 2	22 31		
C	14 59	22 37	D in Apogeo, furthest from the earth.	
7	15 57	22 43		
8	16 54	22 49	Sun due east 19 min. past 7 o'clock.	
9	17 51	22 55		
10	18 49	23 0	Conjunction of Venus and Mercury, as	
11	19 46	23 4	seen from the earth.	
12	20 43	23 8		
C	21 40	23 12		
14	22 38	23 16	Moon eclipses a small star at 9 at night.	
15	23 35	23 19		
16	24 32	23 21		
17	25 29	23 23		
18	26 27	23 25	D in Perigeo, nearest to the earth.	
19	27 24	23 26		
C	28 21	23 27		
21	29 18	23 28	Mercury's greatest elong. from the Sun.	
22	0 [☿] 16	23 28	Sun enters ☿ 27 min. past 5 morning.	
23	1 13	23 28		
24	2 10	23 27		
25	3 7	23 26	Saturn sets at 14 min. past 11 at night.	
26	4 5	23 24	Mars rises at 36 min. past 12 at night.	
C	5 2	23 22		
28	5 59	23 20		
29	6 56	23 17	Venus shines until 12 at night.	
30	7 53	23 14		

Lunations										M	Jupiter	Venus
										D	fets	fe s.
First Quarter 8th day, at 5 morning.										1	10 2 44	9 2 54
Full Moon 15th day, at 7 morning.										7	10 21	9 45
Last Quarter 21st day, at 10 night.										13	9 59	9 37
New Moon 29th day, at 3 afternoon.										19	9 36	9 25
										25	9 14	9 14
M	W	Holy-Days	Moon's	Moon's	D	rises	Aspects and					
D	D	☉ rises & fets	Longit.	Declin.	& fets	Weather						
1	T	☉ rises 3 46	25 26 21	24 n 48	9 a 43	Now expect						
2	F	Visitat. V. M.	7 24 24	21 20 10	3	some showers						
3	S	Dog days beg.	19 18 17	2 10 18		of rain.						
4	C	S. af. Trin.	1 7 12	6 10 29								
5	M	[Tra. S. Mart.	12 54 6	46 10 39								
6	T	Cam. Co. O. Mid.	24 43 1	10 10 48								
7	W	Trin. T. ends	6 40 4	31 10 58		Fair and hot						
8	T	[Tho. à Beck.	18 50 10	8 11 9		about this						
9	F	Cam. T. ends	1 18 15	31 11 24		time.						
10	S	☉ fets 8 8	14 9 20	22 11 43								
11	C	S. af. Trin.	27 27 24	24 morn								
12	M	Oxford Act	11 11 27	12 0 10								
13	T		25 23 28	23 0 52		Brisk winds,						
14	W	☉ rises 3 56	9 58 27	38 1 53		inclining to						
15	T	Swithin	24 50 24	56 D rises								
16	F		9 49 20	27 9 14		δ h 24						
17	S	Oxf. T. ends	24 48 14	45 9 33		dryness.						
18	C	S. af. Trin.	9 38 8	13 9 46		δ ☉ 8						
19	M		24 13 1	20 9 59								
20	T	Margaret	8 29 5 n	27 10 10								
21	W	☉ fets 7 56	22 25 11	49 10 25		More hot						
22	T	Mary Magd.	6 17 28	10 41		but not with-						
23	F		19 19 22	8 11 4		out some						
24	S	[St. James	2 19 25	38 11 34								
25	C	S. af. Trin	15 5 27	45 morn		δ h 2 ♀						
26	M	Anne	27 37 26	0 15		* δ ♀						
27	T		9 58 27	39 1 11		δ 24 ♀						
28	W	☉ rises 4 14	22 8 25	34 2 17		showers.						
29	T		4 10 22	20 D fets								
30	F	☉ fets 7 43	16 4 18	12 8 22								
31	S		27 54 13	24 8 34								

D	Saturn		Jupiter		Mars		Venus	
M	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	3m 28	11 n 51	2m 17	11 n 39	5 14	11 n 59	6 12	20 n 22
7	4 1	11 38	3 19	11 17	9 29	13 24	13 26	18 25
13	4 37	11 25	4 23	10 53	13 41	14 43	20 39	16 11
19	5 15	11 11	5 30	10 28	17 49	15 59	27 51	13 41
25	5 55	10 56	6 39	10 2	21 54	17 7	5m 1	11 0

D	Sun's		Sun's		Observations
M	Longit.	Declin.	Longit.	Declin.	
1	8 25	12 10	23 n 10		Mercury sets at 16 min. past 9 at night.
2	9 48	23 6			
3	10 45	23 2			
C 11	42	22 57			☿ in Apogeo, furthest from the earth.
5	12 40	22 52			Mercury stationary, as seen from the earth.
6	13 37	22 46			Days decreased 12 minutes.
7	14 34	22 40			
8	15 31	22 34			
9	16 28	22 27			
10	17 26	22 20			
C 18	23	22 12			Sun east 16 min. past 7 o'clock.
12	19 20	22 4			
13	20 17	21 56			
14	21 14	21 47			Days decreased 26 minutes.
15	22 12	21 38			Conjunction of Jupiter and Saturn, as seen from the earth—Jupiter the lowest star.
16	23 9	21 29			Such a conjunction happens but once in 20 years.
C 25	3	21 9			
19	26 1	20 58			
20	26 58	20 47			☿ in Perigeo, nearest the earth 16th day.
21	27 55	20 36			
22	28 52	20 25			
23	29 50	20 13			Sun enters ♋ 17 min. past 4 afternoon.
24	0 47	20 0			Moon amongst the 7 Stars seen after 1 in the morning.
C 1	44	19 48			
26	2 42	19 35			Venus in conjunction with Jupiter and Saturn, as seen from the earth.
27	3 39	19 22			
28	4 37	19 8			
29	5 34	18 54			Mercury stationary, as seen from the earth.
30	6 31	18 40			
31	7 29	18 25			

Lunations

M	Jupiter, Venus
D	sets sets

First Quarter 6th day, at 7 at night.

Full Moon 13th day, at 3 afternoon.

Last Quarter 20th day, at 7 morning.

New moon 28th day, at 7 morning.

1	8	a	49	9	a	0
7	8	27	8	47		
13	8	6	8	34		
19	7	46	8	21		
25	7	28	8	8		

M	W	Holy-Days	Moon's	Moon's	risets	Aspects and
D	D	☉ rises & sets	Longit.	Declin.	& sets	Weather
1	C	7 S. aft. Trin.	9 m 40	8 n 8	8 a 45	Fine, with
2	M	[Lam. day	21 27	2 35	8 56	gentle showers.
3	T		3 a 17	3 8 4	9 5	
4	W	☉ rises 4 24	15 15	8 40	9 15	
5	T		27 25	14 3	9 28	Hot, with
6	F	Transfigurat.	9 m 51	19 0	9 43	hying clouds.
7	S	Pro. Ann. b. Nam	22 39	23 14	10 7	
8	C	8 S. aft. T. [of J.	5 4 52	26 26	10 41	
9	M	☉ sets 7 27	19 32	28 14	11 31	
10	T	Lawrence [d.e	3 1/2 40	28 17	morn	Now wind and
11	W	Ds. Br. b. [Dog	18 14	26 25	0 42	rain may be
12	T	Fr. Wa. b.	3 m 9	22 40	2 13	expected.
13	F	Old Lammas	18 17	17 22	D rises	
14	S	☉ rises 4 42	3 1/2 29	10 57	7 a 52	
15	C	9 S. Tr. Assum.	18 35	3 56	8 6	* ♂ ♀
16	M	D. York. b.	3 1/2 27	3 n 10	8 18	Hot with
17	T		17 58	9 57	8 32	thunder show-
18	W	☉ sets 7 11	2 8 6	16 2	8 50	
19	T		15 48	21 8	9 10	□ ♀ ♂
20	F	☉ rises 4 52	29 6	25 0	9 39	ers.
21	S	D. of Clar. b.	12 II 3	27 29	10 17	
22	C	10 S. aft. Trin.	24 40	28 30	8 8	Fine weather
23	M		7 25 1	28 3	morn	for the most
24	T	St. Bartholo.	19 11	26 15	0 11	part.
25	W	☉ sets 6 58	1 1/2 10	23 16	1 23	△ ♂ ♀
26	T		13 3	19 21	2 37	
27	F		24 52	14 41	3 51	
28	S	St. Augustine	6 m 39	9 30	D sets	☉ eclips. visib.
29	C	11 S. Tr.	18 27	4 0	7 a 8	□ ♀ ♂
30	M	[J. Bapt.	0 a 17	1 s 40	7 18	Thunder in
31	T		12 12	7 19	7 29	some places.

D	Saturn		Jupiter		Mars		Venus.	
M	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	6 π 42	10 n 38	8 π 2	9 n 31	26 8 35	18 n 21	13 π 21	7 n 39
7	7 25	10 22	9 15	9 3	0 11 30	9 16	20 27	4 40
13	8 8	10 6	10 30	8 35	4 19	20 6	27 32	1 36
19	8 53	9 49	11 46	8 6	8 3	20 50	4 34	1 30
25	9 38	9 32	13 2	7 37	11 42	21 28	11 33	4 35

D	Sun's	Sun's	Observations					
M	Longit.	Declin.						
C	8 26	18 n 10	D in Apogeo, farthest from the earth.					
2	9 24	17 55						
3	10 21	17 40	Saturn sets 43 min. past 8 at night.					
4	11 19	17 24						
5	12 16	17 8	Mars rises at 11 at night.					
6	13 14	16 52						
7	14 11	16 35	Mercury at his greatest elongation.					
C	15 9	16 19						
9	16 6	16 2	Sun east 52 min. past 6 o'clock.					
10	17 4	15 44						
11	18 2	15 27	Days decreased 1 hour 45 minutes.					
12	18 59	15 9						
13	19 57	14 5						
14	20 54	14 33	D in Perigeo, nearest to the earth.					
C	21 52	14 14	Mercury rises at 3 in the morning.					
16	22 50	13 55						
17	23 47	13 36	Day breaks at 21 min. past 2 o'clock.					
18	24 45	13 17	Twilight ends 35 min. past 9 o'clock.					
19	25 43	12 58						
20	26 41	12 38						
21	27 39	12 18	Sun east 39 min. past 6 o'clock.					
C	28 36	11 58						
23	29 34	11 38	Sun enters π 39 min. past 10 at night					
24	0 π 32	11 18	Day decreased 2 hours 30 minutes.					
25	1 30	10 57						
26	2 28	10 36	Saturn sets 25 min. past 7 afternoon.					
27	3 26	10 15	D in Apogeo, farthest from the earth.					
28	4 24	9 54	Sun eclipsed, partly visible.					
C	5 22	9 33						
30	6 20	9 12	Mars rises 14 min. past 10 at night.					
31	7 18	8 50						

Lunations

M	Jupiter	Venus
D	rises	fets

First Quarter 5th day, at 7 morning.

Full Moon 11th day, at 11 night.

Last Quarter 18th day, at 8 night.

New Moon 26th day, at midnight.

1	5 m 45	7 a 54
7	5 32	7 43
13	5 18	7 31
19	5 4	7 20
25	4 49	7 11

M	W	Holy-Days	Moon's	Moon's	D rises	Aspects and
D	D	☉ rises & fets	Longit.	Declin.	& fets	Weather
1	W	Giles	24 $\triangle$ 15	12 s 45	7 a 42	♂ ☉ ♀
2	T	Lond. bt. 1666	6 m 30	17 47	7 55	♂ ♀ ♀
3	F		18 58	22 11	8 15	♂ ☉ ♀
4	S	☉ rises 5 21	1 1 45	25 39	8 44	Wind and
5	C	2 S. af. Trin.	14 53	27 52	9 25	♂ ♀ ♀
6	M		28 25	28 32	10 26	Rain may now
7	T	Enurchus	12 h 21	27 26	11 45	☐ ♂ ♀
8	W	Nat. V. M.	26 43	24 31	morn	be expected.
9	T		11 $\sim$ 27	19 56	1 18	♂ ☉ ♀
10	F	☉ fets 6 28	26 27	14 1	2 53	
11	S		11 $\times$ 37	7 13	D rises	D eclipsed, wif.
12	C	3 S. af. Trin.	26 47	0 1	6 a 32	Fine for the
13	M		11 ∇ 47	7 n 7	6 44	season.
14	T	Holy Cross	26 30	13 43	7 2	
15	W	Ember Week	10 8 49	19 24	7 22	☐ ☉ ♂
16	T	☉ rises 5 44	24 41	23 52	7 46	Some Thunder.
17	F	Lambert	8 Π 6	6 54	8 22	* ♀ ♀
18	S		21 6	28 22	9 10	
19	C	4 S. af. Trin.	3 $\boxminus$ 42	28 19	10 10	
20	M	☉ fets 6 8	16 0	26 50	11 20	Showers now
21	T	St. Matthew	28 4	24 8	morn	about.
22	W	K. Geo. 3 cr.	9 Ω 58	20 27	0 34	
23	T		21 47	15 58	1 48	
24	F	☉ rises 6 0	3 ∇ 33	10 55	3 1	Fine and
25	S		15 21	5 28	4 12	pleasant
26	C	5 S. Trin. O.	27 13	0 s 11	D fets	weather now
27	M	Holy Ro. Cypr.	9 $\triangle$ 10	5 53	5 a 47	about.
28	T	[Wirt. b.]	0 f. 55	11 25	6 0	* ♀ ♀
29	W	St. Mic. Ds.	3 ∇ 31	16 35	6 13	
30	T	St. Jerome	15 58	21 9	6 31	

D	Saturn		Jupiter		Mars		Venus	
M	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	10m 31	9 n 13	14m 33	7 n 2	15 11 49	22 n 5	19 23 39	8 s 8
7	11 16	8 56	15 51	6 32	19 12	22 31	26 33	11 4
13	12 1	8 39	17 9	6 2	22 27	22 51	3m 22	13 52
19	12 46	8 22	18 26	5 32	25 33	23 8	10 7	16 31
25	13 30	8 6	19 24	5 2	28 29	23 21	16 47	18 56

D	Sun's		Sun's		Observations
M	Longit.	Declin.	Longit.	Declin.	
1	8m 17	8 n 29			Sun east 7 minutes past 6 o'clock.
2	9 15	8 7			
3	10 13	7 45			
4	11 11	7 23			Mercury sets 56 minutes past 6 at night.
C	12 9	7 1			
6	13 8	6 38			Day breaks 19 minutes past 3 o'clock.
7	14 6	6 16			
8	15 4	5 53			
9	16 2	5 31			Twilight ends 33 min. past 8 at night.
10	17 1	5 8			
11	17 59	4 45			Moon eclipsed, visible.
C	18 58	4 22			D in Perigeo, nearest to the earth.
13	19 56	3 59			
14	20 55	3 36			
15	21 53	3 13			
16	22 52	2 50			Days decreased 4 hours 2 minutes.
17	23 50	2 27			
18	24 49	2 4			Saturn rises 32 min. past 4 in the morn.
C	25 47	1 40			
20	26 46	1 17			
21	27 45	0 54			Mars rises 30 min. past 9 at night.
22	28 44	0 30			
23	29 43	0 7			Sun enters π 8 min. past 7 at night.
24	0 41	0 s 16			D in Apogeo, farthest from the earth.
25	1 40	0 40			Mercury sets 26 min. past 6 at night.
C	2 39	1 3			
27	3 38	1 27			
28	4 37	1 50			Day breaks at 11 min. past 4 o'clock.
29	5 36	2 14			
30	6 35	2 37			

Lunations						M	Jupiter	Venus
						D	rises	sets
First Quarter 4th day, at 5 a. m.						1	4m 35	7 a 1
Full Moon 11th day, at 8 morning.						7	4 21	6 58
Last Quarter 18th day, at noon.						13	4 6	6 46
New Moon 26th day, at 5 afternoon.						19	3 50	6 40
						25	3 33	6 36
M	W	Holy-Days	Moon's	Moon's	riser	Aspects and		
D	D	☉ rises & sets	Longit.	Declin.	& sets	Weather		
1	F	Remigius	28 m 37	24 s 51	6 a 56	The month begins with		
2	S		11 4 30	27 22	7 32			
3	C	15 S. af. Trin.	24 39	28 27	8 26	Δ ♂ ♀		
4	M	☉ rises 6 19	8 25	27 51	9 37			
5	T		21 53	25 37	11 1	Very fine weather.		
6	W	Faith	5 59	21 44	morn			
7	T	☉ sets 5 35	20 23	16 29	0 a 32			
8	F		5 4	10 12	2 4			
9	S	St. Denys	19 56	3 16	3 39	Cloudy and dull, and rather cool.		
10	C	17 S. Trin. Ex. [Ca. T. b.	4 53	3 n 52	5 2			
11	M	Old Mic.	19 47	10 45	riser			
12	T		4 8 28	16 56	5 a 32			
13	W	Tran. K. Ed. C.	18 51	22 3	5 55			
14	T		2 11 49	25 46	6 26			
15	F	☉ rises 6 41	16 21	27 53	7 9	Wind and rain may now be expected.		
16	S	[Echeldreda	29 26	28 23	8 7			
17	C	18 S. af. Trin.	12 6	27 19	9 14			
18	M	St. Luke	24 25	24 57	10 28			
19	T		6 29	21 30	11 41			
20	W	☉ sets 5 10	18 22	17 13	morn			
21	T		0 9	12 20	0 54			
22	F	☉ rises 5 6	11 56	7 0	2 6			
23	S		23 56	1 25	3 16	Rough and cold winds.		
24	C	19 S. af. Trin.	5 46	4 s 16	4 27			
25	M	Ge. 3. ac. Crif.	17 52	9 53	5 39			
26	F	K. Geo. 3 pr.	om 11	15 11	riser			
27	W	[Jude	12 44	19 59	4 a 43			
28	F	St. Simon and	25 29	23 36	5 7			
29	F	☉ sets 4 53	8 27	26 45	5 40	Stormy weather now about.		
30	S		21 37	28 11	6 28			
31	C	20 S. af. Trin.	4 59	27 59	7 33			

D	Saturn		Jupiter		Mars		Venus	
M	Long	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	14 14	7 n 49	21 12 0	4 n 32	12 51 4	23 n 30	23 11 21	21 s 7
7	14 56	7 34	22 16	4 2	3 45	23 57	29 49	23 1
13	15 37	7 19	23 31	3 33	6 1	23 43	6 1 8	24 36
19	16 17	7 4	24 44	3 5	8 1	23 49	12 16	25 52
25	16 55	6 50	25 55	2 38	9 42	23 55	18 12	20 40

1)	Sun's	Sun's
M	Longit.	Declin.

Observations

1	7 34	3 s 0	
2	8 33	3 24	Day breaks 20 min. past 4 o'clock.
C 9	23	3 47	
4	10 32	4 10	Twilight ends 35 min. past 7 o'clock.
5	11 31	4 34	
6	12 30	4 57	
7	13 29	5 20	Moon eclipses a small star 23 min. past 9
8	14 29	5 43	at night.
9	15 28	6 6	D in Perigeo, nearest to the earth.
C 16	27	6 29	Moon eclipses a small star 34 min. past
11	17 27	6 51	10 at night.
12	18 26	7 14	Saturn rises 20 min. past 3 morning.
13	19 26	7 37	Jupiter rises at 4 in the morning.
14	20 25	7 59	
15	21 25	8 22	
16	22 24	8 44	Mars rises 48 min. past 8 at night.
C 23	24	9 6	Mercury at his greatest elongation from
18	24 23	9 28	the sun.
19	25 23	9 50	
20	26 23	10 11	Venus at her greatest elongation from
21	27 23	10 33	the sun.
22	28 22	10 55	D in Apogeo, farthest from the earth.
23	29 22	11 16	
C om	22 11	37	Sun enters m at 8 min. past 3 morning.
25	1 22	11 58	
26	2 22	12 19	Pole-Star south near 11 at night.
27	3 22	12 39	
28	4 22	12 59	
29	5 22	13 20	Mercury stationary, as seen from the earth.
30	6 22	13 39	
C 7	22	13 59	

Lunations

M	Jupiter	Venu.
D	rises	sets

First Quarter 3d day, at 1 morning.

Full Moon 9th day, at 7 night.

Last Quarter 17th day, at 8 morning.

New Moon 25th day, at 8 morning.

1	3m 14	6 a 35
7	2 57	6 33
13	2 39	6 31
19	2 20	6 29
25	2 0	6 26

M	W	Holy Days	Moon's	Moon's	D rises	Aspects and
D	D	☉ rises & sets	Longit.	Declin.	& sets	Weather.
1	M	MAH Saints	18 1/2 32	26 s 7	8 a 54	Rough cold
2	T	D. Kent b.	2 17	22 42	10 19	winds.
3	W	Frs. Soph. b.	16 14	17 56	11 48	
4	T	K. Wm. land.	0 X 22	12 8	morn	Δ ☉ ♄, ☐ ♃ ♀
5	F	Powder Plot	14 42	5 37	1 16	
6	S	Mic. T. b. Leo.	29 9	1 n 13	2 43	Wet and
7	C	21 S. aft. Tr.	13 V 42	8 2	4 10	* ♄ ♀
8	M	Pra. Au. So. b.	28 14	14 25	5 37	♄ ☉ ♀
9	T	Lord Mayor's d.	12 8 39	19 57	D rises	flabby weather.
10	W	☉ rises 7 28	26 50	24 16	4 a 24	
11	T	St. Martin	10 11 43	27 4	5 0	* ☉ ♄
12	F	Cam. T. d. m.	24 13	28 12	5 54	Δ ♄ ♀
13	S	Britius	7 20 19	27 41	6 59	
14	C	22 S. af. Trin.	20 1	25 43	8 11	Very cold
15	M	Machutus	2 22 23	22 33	9 25	winds about
16	T	☉ sets 4 22	14 28	18 29	10 40	this time.
17	W	Hugh, Bp. of Lin.	26 22	13 44	11 51	
18	T	☉ rises 7 41	8 m 10	8 32	morn	* ♄ ♀
19	F	☉ sets 4 18	19 57	3 3	1 0	Sleet or cold
20	S	Edmund	1 25 50	2 6 35	2 11	rains.
21	C	23 S. af. Trin.	13 53	8 11	3 22	
22	M	Cecilia	26 9	13 35	4 33	
23	T	Clement. Old	8 m 41	18 33	5 49	* ☐ ♃, ♄ ♄ ♀
24	W	[Mart.	21 31	22 48	7 8	Δ ♄ ♀
25	T	Du. of Glo. b.	4 1 38	26 0	D sets	
26	F	[Catharine	18 0	27 49	4 a 17	Winterly wea-
27	S	☉ rises 7 53	1 1/2 35	28 1	5 15	ther.
28	C	Advent Sun.	15 21	26 30	6 36	
29	M	Mic. Term e.	29 13	23 21	8 2	
30	T	St. Andrew	13 10	18 49	9 31	

D	Saturn		Jupiter		Mars		Venus	
M	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long.	Decl.
1	17 ^h 35	6 n 35	27 ^h 15	2 n 7	11 ^h 13	24 n 4	24 ^h 47	27 s 22
7	18 9	6 24	28 21	1 41	12 4	24 15	25 3	27 31
13	18 39	6 13	29 24	1 17	12 28	24 29	4 53	27 20
19	19 6	6 4	30 23	0 54	12 23	24 46	9 10	26 52
25	19 30	5 56	1 19	0 33	11 48	25 7	12 44	26 10

D	Sun's		Sun's		Observations
M	Longit.	Declin.	Longit.	Declin.	
1	8 ^m 22	14 s 19			Day breaks at 17 min. past 5 o'clock,
2	9 22	14 38			
3	10 23	14 57			Moon eclipses a small star at 8 at night.
4	11 23	15 16			
5	12 23	15 34			
6	13 23	15 53			D in Perigeo, nearest to the earth.
C	14 24	16 11			
8	15 24	16 28			
9	16 24	16 46			Transit of Mercury over the Sun, partly
10	17 25	17 3			visible.
11	18 25	17 20			Day decreased 7 hours 34 minutes.
12	19 25	17 36			
13	20 26	17 53			
C	21 26	18 9			Twilight ends 24 min. past 6 o'clock.
15	22 27	18 24			Mars stationary, as seen from the earth.
16	23 27	18 39			
17	24 28	18 54			D in Apogeo, farthest from the earth.
18	25 28	19 9			Mercury stationary, as seen from the earth.
19	26 29	19 23			
20	27 30	19 37			
C	28 30	19 51			Seven-stars south at 12 at night.
22	29 31	20 4			Sun enters ♋ at 25 min. past 11 at night.
23	0 32	20 17			
24	1 33	20 30			
25	2 33	20 42			Mercury at his greatest elongation from
26	3 34	20 53			the Sun, as seen from the earth.
27	4 35	21 5			
C	5 36	21 16			
29	6 37	21 26			Saturn rises 34 min. past 12 at night.
30	7 38	21 36			

Lunations					M D	Jupiter rises	Venus sets
First Quarter 2d day, at 9 morning.					1	1 m 38	6 a 18
Full Moon 9th day, at 8 morning.					7	1 17	6 6
Last Quarter 17th day, at 6 morning.					13	0 55	5 49
New Moon 24th day, at 10 night.					19	0 32	5 24
First Quarter 31st day, at 5 afternoon.					25	0 7	4 54
M D	W D	Holy-Days, Moon's rises & sets Longit.	Moon's Declin.	D & sets	Aspects and Weather		
1	W		27 $\approx$ 11	3 s 15	10 a 57	* $\frac{1}{2}$ $\frac{1}{2}$	
2	T	☉ rises 7 58	11 $\times$ 15	6 59	morn	Rough cold	
3	F	☉ sets 4 1	25 21	0 22	0 21	winds, with	
4	S		9 ∇ 28	6 n 16	1 43	frosts.	
5	C	2 S. in Adv.	23 36	12 35	3 8		
6	M	[Nicholas	7 8 40	18 14	4 36	Sleet or show-	
7	T		21 39	22 52	6 3	ers now	
8	W	Concep. V.M.	5 Π 27	26 9	7 26	about.	
9	T		19 1	27 50	D rises		
10	F	☉ rises 8 4	2 $\approx$ 17	27 56	4 a 30	* $\frac{1}{4}$ $\frac{1}{2}$	
11	S		15 15	26 26	5 40		
12	C	3 S. in Adv.	27 53	23 37	6 56	☐ ☉ $\frac{1}{2}$	
13	M	Lucy	10 Ω 13	19 46	8 10	Frosty and	
14	T		22 18	15 10	9 25	perhaps some	
15	W	Emb. Week.	4 μ 12	10 4	10 35	snow.	
16	T	Can. T.e. OSapi	16 1	4 39	11 44		
17	F	Oxf. T. ends	27 49	0 s 55	morn		
18	S	☉ sets 3 52	9 $\triangle$ 42	6 30	0 54	Foggy and	
19	C	S. in Adv.	21 46	11 55	2 4		
20	M		4 μ 6	16 59	3 17	☐ $\frac{1}{4}$ $\frac{1}{2}$ dark	
21	T	St. Thomas.	16 45	24 28	4 34	weather.	
22	W	[Shor st day	29 45	25 2	5 53	☐ $\frac{1}{2}$ $\frac{1}{2}$	
23	T	☉ rises 8 8	13 $\uparrow$ 8	27 22	7 12	Weather pretty	
24	F		26 51	28 6	D sets	8 ☉ $\frac{1}{2}$	
25	S	Christmas d.	10 ν 51	27 5	3 a 56	open.	
26	C	S. af. Chr. S.	25 4	24 18	5 30		
27	M	St. Jon. [Step	9 $\approx$ 24	19 58	7 1	☐ ☉ $\frac{1}{4}$	
28	T	Innocent	23 46	14 29	8 30	☐ $\frac{1}{4}$ $\frac{1}{2}$; 8 $\frac{1}{2}$ $\frac{1}{2}$	
29	W		8 $\times$ 5	8 12	9 57	Some frosts.	
30	T	☉ sets 3 54	22 19	1 34	11 22		
31	F	Silvester	6 ∇ 27	5 n 5	morn	☉ ☉ $\frac{1}{2}$	

D	Saturn		Jupiter		Mars		Venus	
M	Long.	Decl.	Long.	Decl.	Long.	Decl.	Long	Decl.
1	19 17 51	5 n 49	2 12	0 n 13	10 16 40	25 n 31	15 15 23	25 s 13
7	20 9	5 43	3 0	0 s 5	9 5	25 55	16 54	24 12
13	20 23	5 39	3 42	0 20	7 6	26 18	17 4	23 3
19	20 33	5 37	4 20	0 34	4 50	26 37	15 44	21 50
25	20 39	5 36	4 52	0 45	2 27	26 52	13 4	2 34

D	Sun's	Sun's	Observations					
M	Longit.	Declin.						
1	8 39	21 s 46	Day breaks 54 min. past 5 o'clock.					
2	9 39	21 55	Twilight ends 5 min. past 6 o'clock.					
3	10 40	22 4	D in Perigeo, nearest to the earth.					
4	11 41	22 13						
C	12 42	22 21						
6	13 43	22 28						
7	14 44	22 36	Day decreased 8 hours 40 min.					
8	15 45	22 42						
9	16 46	22 48	Saturn rises at 12 at night.					
10	17 47	22 54	Venus stationary, as seen from the earth.					
11	18 48	23 0	Moon eclipses a small star at 9 at night.					
C	19 49	23 5						
3	20 50	23 9						
14	21 51	23 13	Venus sets 45 min. past 5 at night.					
15	22 52	23 16	Mercury rises at 7 in the morning.					
16	23 54	23 20	D in Apogeo, farthest from the earth.					
17	24 55	23 22						
18	25 56	23 24	Day breaks at 6 o'clock.					
C	26 57	23 26						
20	27 58	23 27						
21	28 59	23 28						
22	0 0	23 28	Sun enters 15 51 past 11 morning.					
23	1 2	23 28						
24	2 3	23 27	Days decreased 8 hours 50 minutes.					
25	3 4	23 26						
C	4 5	23 24						
27	5 6	23 22						
28	6 8	23 19	D in Perigeo, nearest the earth.					
29	7 9	23 16						
30	8 10	23 13	Days increased 4 minutes.					
31	9 11	23 9	Saturn stationary, as seen from the earth.					

The Eclipses of Jupiter's First

January				February				March				April			
Immersion.				Immersion.				Emergence.				Emergence.			
d.	h.	m.	s.	d.	h.	m.	s.	d.	h.	m.	s.	d.	h.	m.	s.
2 ^h 14	1	14		1 ^h 16	3	57		2	1	54	10	1	3	59	41
4	8	29	38	3 ^h 10	32	21		3	20	22	44	2	22	28	18
6	2	57	58	5	5	0	49	5 ^h 14	51	18		4	16	56	53
7	21	26	22	6	23	29	14	7 ^h 9	19	47		6 ^h 11	25	32	
9 ^h 15	54	43		8 ^h 17	57	43		9	3	48	21	8	5	54	7
11 ^h 10	23	7		10 ^h 12	26	8		10	22	16	50	10	0	22	46
13 ^h 4	51	28		12 ^h 6	54	38		12 ^h 16	45	25		11	18	51	22
14	23	19	53	14	1	23	4	14 ^h 11	13	56		13 ^h 13	20	1	
16 ^h 17	48	14		15	19	51	35	16	5	42	31	15 ^h 7	48	38	
18 ^h 12	16	39		17 ^h 14	20	3		18	0	11	2	17	2	17	16
20	6	45	1	19 ^h 8	48	34		19	18	39	38	18	20	45	54
22	1	13	28	Emergence.				21 ^h 13	8	10		20	15	14	33
23	19	41	50	21	5	31	47	23 ^h 7	56	46		22 ^h 9	43	11	
25 ^h 14	10	16		23	0	0	18	25	2	5	19	24	4	11	50
27 ^h 8	38	39		24	18	28	45	26	20	33	56	25	22	40	28
29	3	7	6	26 ^h 12	57	16		28 ^h 15	2	30		27	17	9	7
30	21	35	30	28 ^h 7	25	44		30 ^h 9	31	7		29 ^h 11	37	47	

May				June				July				August			
Emergence.				Emergence.				Emergence.				Emergence.			
d.	h.	m.	s.	d.	h.	m.	s.	d.	h.	m.	s.	d.	h.	m.	s.
1	6	6	26	2	2	42	22	2	4	49	37	1	6	56	18
3	0	55	5	3	21	11	4	3	23	18	14	3	1	24	56
4	19	3	45	5	15	39	42	5	17	46	55	4	19	53	30
6	13	32	24	7 ^h 10	8	24		7	12	15	31	6	14	22	8
8	8	1	4	9	4	37	2	9	6	44	12	8	8	50	42
10	2	29	44	10	23	5	44	11	1	12	48	10	3	19	20
11	20	58	23	12	17	34	22	12	19	41	28				
13	15	27	3	14	12	3	3	14	14	10	5				
15 ^h 9	55	42		16	6	31	42	16	8	38	45				
17	4	24	22	18	1	0	23	18	3	7	21				
18	22	53	2	19	19	29	2	19	21	56	1				
20	17	21	43	21	13	57	42	21	16	4	37				
22 ^h 11	50	22		23	8	26	20	23	10	39	16				
24	6	19	4	25	2	55	1	25	5	1	51				
26	0	47	42	26	21	23	38	26	23	30	30				
27	19	16	24	28	15	52	19	28	17	59	4				
29	13	45	3	30	10	20	56	30	12	27	43				

Satellite for 1802.

September	October	November	December
Immersions.	Immersions.	Immersions.	Immersions.
d. h. m. s.	d. h. m. s.	d. h. m. s.	d. h. m. s.
The Eclipses	9 5 16 1	1 5 25 54	1 7 28 55
of Jupiter's	10 21 44 26	2 23 54 24	3 1 57 14
Satellites are	12 18 12 58	4 18 22 45	4 20 25 42
not visible	14 12 41 23	6 12 51 15	6* 14 54 0
this month,	16 7 9 54	8 7 19 36	8 9 22 28
Jupiter being	18 1 38 18	10 1 48 6	10 3 50 45
too near the	19 20 6 49	11 20 16 27	11 22 19 13
Sun.	21 14 35 14	13 14 44 56	13* 16 47 30
	23 9 3 44	15 9 13 16	15 11 15 57
	25 3 32 8	17 3 41 45	17 5 44 14
	26 22 0 39	18 22 10 5	19 0 12 41
	28* 16 29 2	20* 16 38 33	20* 18 40 59
	30 10 57 31	22 11 6 53	22* 13 9 25
		24 5 35 22	24 7 37 44
		26 0 3 41	26 2 6 11
		27* 18 32 9	27 20 34 27
		29 13 0 27	29* 15 2 53
			31 9 31 11

N.B. Those marked with an asterisk are visible at *Greenwich*; and the times are *mean* or *clock* time.

To illustrate the Use of the preceding Table by an Example :
—Suppose on the 16th Day of October this Year, the Time of the Immersion of Jupiter's first Satellite be observed by a Telescope, in an unknown Meridian, to happen at 8h. 58 min. 14 seconds; I find by the Table, that the Time of his Immersion will happen at the British Observatory at 7h. 9 min. 54 sec. the same Day: The Difference of the Time is 1h. 48 min. 20 sec. which being converted into Degrees and Minutes of the Equator, at the Rate of 15 Degrees per Hour, will make 27 deg. 5 min. the Longitude of the Place of Observation to the East; because the Time is more than that at the British Observatory.

operation.	{	Immersion observed - - - - -	8 ^h 58 ^m 14
		Immersion at <i>Greenwich</i> - - - - -	7 9 54
		The Difference of Time - - - - -	1 48 20
		Answering to - - - - -	27° 5' 0

Mercury's

Day	Long.		Declin.		Long.		Declin.		Long.		Declin.	
1	25	13	23	s	35	15	20	18	8	11	26	43
4	29	43	24	s	1	20	41	16		23	26	58
7	4	17	24		16	26	6	14		23	25	53
10	8	54	24		20	1	32	12	February	1	23	44
13	13	36	24	January	12	6	54	9		50	20	59
16	18	23	23	January	51	12	5	7		24	18	11
19	23	14	23	January	16	16	53	4		58	15	51
22	28	10	22		29	21	2	2		42	14	16
25	3	12	21		28	24	16	0		45	13	34
28	8	20	20		13	26	20	0	n	43	13	44
1	15	10	6	s	34	21	56	6	n	26	25	18
4	17	1	6		21	27	19	8		41	0	50
7	19	25	5		50	2	58	11		1	5	58
10	22	18	5		2	8	54	13		23	10	43
13	25	35	3		59	15	5	15		44	15	3
16	29	13	2		42	21	28	18	May	0	18	58
19	3	11	1		13	28	1	20		6	22	26
22	7	27	0	n	29	4	35	21		56	25	26
25	12	0	2		18	11	5	23		26	27	56
28	16	50	4		18	17	22	24		32	29	51
1	1	10	18	n	24	21	39	18	n	42	7	58
4	1	49	17		32	22	58	19		16	13	40
7	1	45	16		48	25	14	19		40	19	13
10	1	2	16		16	28	26	19	August	50	24	35
13	29	39	15	July	59	2	29	19		41	29	47
16	27	48	15		57	7	16	19		6	4	50
19	25	46	16		9	12	37	18		7	9	44
22	23	49	16		34	18	19	16		45	14	28
25	22	17	17		8	24	13	15		3	19	4
28	21	25	17		48	0	9	13		5	23	32
1	27	52	11	s	57	24	17	21	s	4	19	31
4	2	2	13		45	22	10	19		52	23	34
7	6	3	15		26	18	46	18		2	27	49
10	9	53	16		59	14	49	15	November	56	2	12
13	13	29	18		22	11	22	14		0	6	40
16	16	48	19		34	9	20	12		44	11	12
19	19	45	20		33	9	1	12		16	15	46
22	22	13	21		17	10	13	12		32	20	23
25	24	1	21		44	12	37	13		20	25	2
28	24	56	21		46	15	48	14		28	29	44

EQUATION of TIME to the nearest Minute.

Day	Jan sub	Feb sub	Mar sub	Apr sub	May add	June add	July sub	Aug sub	Sept add	Oct add	Nov add	Dec add	Day
1	min	m	m	m	m	m	m	m	m	m	m	m	1
2	4	14	12	4	3	3	3	6	0	11	16	10	2
3	4	14	12	3	3	2	4	6	1	11	16	10	3
4	5	14	12	3	3	2	4	6	1	11	16	9	4
5	5	14	12	3	4	2	4	6	1	11	16	9	5
6	6	14	12	2	4	2	4	6	2	12	16	8	6
7	6	15	11	2	4	2	4	5	2	12	16	8	7
8	7	15	11	2	4	1	5	5	2	12	16	8	8
9	7	15	11	1	4	1	5	5	3	13	16	7	9
10	8	15	10	1	4	1	5	5	3	13	16	6	10
11	8	15	10	1	4	1	5	5	4	13	16	6	11
12	9	15	10	1	4	0	5	4	4	14	15	5	12
13	9	15	9	0	4	0	5	4	4	14	15	5	13
14	10	15	9	0	4	0	5	4	5	14	15	4	14
15	10	15	9	add	4	sub	6	4	5	14	15	4	15
16	10	14	9	0	4	0	6	4	6	15	15	4	16
17	11	14	8	1	4	0	6	4	6	15	15	3	17
18	11	14	8	1	4	0	6	4	6	15	14	3	18
19	11	14	8	1	4	1	6	3	7	15	14	2	19
20	11	14	7	1	4	1	6	3	7	15	14	2	20
21	12	14	7	2	4	1	6	3	7	15	14	1	21
22	12	14	7	2	4	2	6	2	8	16	13	1	22
23	12	14	6	2	4	2	6	2	8	16	13	0	23
24	13	14	6	2	4	2	6	2	8	16	13	sub	24
25	13	13	6	2	3	2	6	2	9	16	12	1	25
26	13	13	6	3	3	2	6	1	9	16	12	1	26
27	13	13	5	3	3	3	6	1	9	16	12	2	27
28	13	13	5	3	3	3	6	1	10	16	11	2	28
29	14		5	3	3	3	6	0	10	16	11	3	29
30	14		4	3	3	3	6	0	10	16	11	3	30
31	14		4		3		6	add		16		4	31

If the equal or clock time be given, add or subtract the tabular numbers to or from it, as directed in the table; the sum or difference will be the apparent or solar time. But do the contrary to reduce the apparent to equal time.

A compendious CHRONOLOGY of MEMORABLE THINGS,
since the Creation to this present Year.

A.P.J.	before <i>Chrif.</i>		Years <i>since.</i>
710	4004	The Creation of the World	5806
1766	2948	Noah born	4750
2366	2348	Noah's Flood began	4150
2481	2233	The Babylonian Monarchy established	4035
2718	1996	Abraham born	3798
2986	1728	Joseph sold into Egypt	3530
3143	1571	Moses born	3373
3223	1491	The Israelites Departure out of Egypt	3293
3530	1184	Troy taken and destroyed by the Greeks	2986
3710	1004	Solomon's Temple built and dedicated	2805
4126	588	Jerusalem and the Temple destroyed	2390
4176	538	Daniel delivered from the Den of Lions	2340
4198	516	The Temple of Jerusalem rebuilt	2318
4391	323	The Death of Alexander the Great	2125
4710	4	The true Year of Chrif's Birth	1806
4714	0	The vulgar Year of Chrif's Birth.	1802

A.D.		
33	The Passion and Resurrection of Jesus Christ	1769
70	Jerusalem and the Temple destroyed by Titus	1732
100	St. John, the last of the Apostles, died Dec. 20.	1702
313	Christianity triumphed under Constantine	1489
476	Augustulus, the last Roman Emperor, deposed	1326
606	The wicked Phocas made Pope Boniface Head of the Church	1196
608	Mahomet broached his Imposture at Mecca	1194
872	Italy and Rome plundered by the Saracens	930
1012	Swain King of Denmark conquered England	790
1066	William Duke of Normandy conquered England	736
1110	Arts and Sciences taught in Cambridge	692
1119	The first War between the French and English	683
1300	The Mariners Compass invented	502
1330	The Canaries discovered by an English Ship	472
1380	Gunpowder and the Use of Guns first found out	422
1453	Constantinople taken from the Christians	349

A.D.

A.D.

Years
since.

1463	The <i>Persians</i> conquered by <i>Tamerlane</i>	339
1500	<i>Rome</i> plundered by the Duke of <i>Bourbon</i>	302
1517	<i>Martin Luther</i> first disputed against Popery	285
1536	<i>England</i> separated from the Church of <i>Rome</i>	266
1588	The <i>Spanish Armada</i> defeated by the <i>English</i>	214
1603	Q. <i>Eliz.</i> died <i>March 24</i> , and K. <i>James I.</i> began	199
1604	Died of the Plague in <i>London</i> , in 2 Years, 68,596.	198
1605	Gunpowder Treason, <i>Nov. 5</i> .	197
1613	The New River Water brought to <i>London</i>	189
1618	The excellent Sir <i>Walter Raleigh</i> beheaded	184
1625	K. <i>James I.</i> died, K. <i>Charles I.</i> began <i>Mar. 27</i> .	177
1625	35,417 Persons died of the Plague in <i>London</i>	177
1641	The cruel <i>Irish</i> Massacre began, <i>October 23</i> .	161
1643	<i>Burleigh-House</i> stormed by <i>Cromwell</i> , <i>July 24</i> .	159
1649	K. <i>Charles I.</i> beheaded, <i>January 30</i> .	153
1658	<i>Oliver Cromwell</i> died, <i>September 3</i> .	144
1660	K. <i>Charles II.</i> restored, <i>May 29</i> .	142
1665	68,586 Persons died of the Plague in <i>London</i>	137
1666	<i>London</i> burnt, and a great Sea-fight with the <i>Dutch</i>	136
1672	War declared against the <i>Dutch</i> , <i>March 17</i> .	130
1674	A great Snow for 11 Days together	129
1675	The Town of <i>Northampton</i> burnt, <i>Sept. 3</i> .	127
1680	A great and splendid Comet appeared	122
1684	The great Frost that held 13 Weeks	118
1685	K. <i>Charles II.</i> died, <i>Feb. 6</i> , and K. <i>James II.</i> began	117
1685	The Duke of <i>Monmouth</i> beheaded, <i>July 15</i> .	117
1688	Seven Bishops sent to the Tower, <i>June 8</i> .	114
1688	K. <i>James II.</i> abdicated, <i>December 12</i> .	114
1689	K. <i>William</i> and Q. <i>Mary</i> crowned, <i>April 11</i> .	113
1692	The <i>French</i> Fleet entirely defeated by the <i>English</i>	110
1698	<i>Whitehall</i> Palace destroyed by Fire	104
1702	K. <i>William</i> died, <i>March 8</i> , and Q. <i>Anne</i> began	100
1702	Q. <i>Anne</i> proclaimed War against <i>France</i> , <i>May 4</i> .	100
1703	A great and terrible Wind, <i>Nov. 26</i> and <i>27</i> .	99
1704	<i>Gibraltar</i> taken by the <i>English</i>	98
1707	<i>England</i> and <i>Scotland</i> united, <i>May 1</i> .	95
1710	Riots and great Disturbances in <i>England</i>	92
1714	Q. <i>Anne</i> died, <i>August 1</i> , and K. <i>George I.</i> began	88

C 3

A. D.

A.D.

Years
since.

1713	A Rebellion in <i>Scotland</i> and <i>Lancashire</i> suppressed	87
1716	A great Frost in the Beginning of this Year	86
1718	The <i>Spanish</i> Fleet destroyed by Admiral <i>Byng</i>	84
1719	A surprising Meteor seen, <i>March</i> 19, at 8 at Night	83
1719	Mr. <i>Flamsteed</i> , a celebrated Astronomer, died <i>Dec.</i>	83
	31	
1727	The incomparable Sir <i>Isaac Newton</i> died <i>Mar.</i> 20	75
1727	K. <i>George</i> I. died <i>June</i> 11, and K. <i>George</i> II. began	75
1736	The Prince and Princess of <i>Wales</i> married, <i>Ap.</i> 27	66
1739	Letters of Marque published in <i>London</i> against the <i>Spaniards</i> , <i>July</i> 16.	63
1739	War declared by <i>Great Britain</i> against <i>Spain</i>	63
1739	<i>Porto-Bello</i> taken and destroyed by Adm. <i>Vernon</i>	63
1740	A very severe Frost from <i>Dec.</i> 25, to <i>Feb.</i> 27	62
1742	A Comet appeared from <i>Feb.</i> 18, to <i>March</i> 14	60
1743	A splendid Comet appeared from <i>Dec.</i> 23, to <i>Feb.</i> 18, in ♀	59
1744	<i>Mar.</i> 4, <i>France</i> declar. War against <i>England</i> ; and <i>Mar.</i> 31, <i>England</i> declared War against <i>France</i>	58
1745	<i>Cape Breton</i> taken from the <i>French</i> , <i>June</i> 16	57
1746	The <i>Scotch</i> Rebels defeated by the Duke of <i>Cum-</i> <i>berland</i> , at <i>Galloden</i> , near <i>Inverness</i> , <i>April</i> 16	56
1748	A general Peace signed <i>October</i> 7	54
1749	<i>Cape Breton</i> restored to the <i>French</i>	53
1750	The <i>British</i> Fishery established	52
1751	The Prince of <i>Wales</i> died <i>March</i> 20	51
1752	The Date and Calendar altered	50
1755	<i>Lisbon</i> destroyed by an Earthquake, <i>Nov.</i> 1	47
1756	<i>England</i> declared War against <i>France</i> , <i>May</i> 18	46
1756	<i>Minorca</i> taken by the <i>French</i> , <i>June</i> 27.	46
1757	Count <i>Brown</i> defeated by the King of <i>Prussia</i> , near <i>Prague</i> , <i>May</i> 6.	45
1757	The King of <i>Prussia</i> defeated by Count <i>Dawn</i> , at <i>Collin</i> , <i>June</i> 18	45
1758	<i>French</i> defeat. at <i>Crevelt</i> , by Pr. <i>Ferdinand</i> , <i>June</i> 23	44
1758	Lord <i>Howe</i> slain, <i>July</i> 6, and Gen. <i>Abercrombie</i> repulsed at <i>Ticonderoga</i> , <i>July</i> 8	44
1758	<i>Cape Breton</i> taken by the <i>English</i> , <i>July</i> 26	44

A. D.

A.D.		Years since.
1758	The <i>Russians</i> defeated at <i>Zorndorff</i> by the King of <i>Prussia</i> , <i>Sept. 25</i>	44
1759	The Island of <i>Guadaloupe</i> taken by Gen. <i>Barrington</i> and Commodore <i>Moore</i> , <i>May 1</i>	43
1759	<i>French</i> defeated at <i>Minden</i> , by Pr. <i>Ferdinand</i> , <i>Aug. 1</i>	43
1759	The King of <i>Prussia</i> defeated at <i>Cunnersdorff</i> by the Count <i>de Soltikoff</i> , <i>August 12</i>	43
1759	Gen. <i>Wolfe</i> slain, though victorious, <i>Sept. 13</i> , and <i>Quebec</i> taken, <i>Sept. 18</i> , by Gen. <i>Townshend</i>	43
1760	<i>Montreal</i> taken by Gen. <i>Amberst</i> , <i>Sept. 8</i>	42
1760	K. <i>Geo. II.</i> died <i>Oct. 25</i> , and <i>Geo. III.</i> succeeded	42
1761	<i>Pondicherry</i> taken by Col. <i>Coote</i> , <i>Jan. 15</i>	41
1761	K. <i>Geo. III.</i> married Q. <i>Charlotte</i> , <i>Sept. 8</i>	41
1761	K. <i>Geo. III.</i> crowned, <i>Sept. 22</i>	41
1762	The Island of <i>Martinico</i> taken by Gen. <i>Monckton</i> , and Adm. <i>Rodney</i> , <i>Feb. 14</i>	40
1762	<i>George Prince of Wales</i> born, <i>August 12</i>	40
1762	The <i>Havannab</i> taken by Lord <i>Albemarle</i> and Sir <i>George Pocock</i> , <i>August 12</i>	40
1763	A general Peace in all <i>Europe</i>	39
1763	Duke of <i>York</i> born <i>Aug. 16</i>	39
1765	Duke of <i>Clarence</i> born <i>August 21</i>	37
1766	Duchess of <i>Wirtemberg</i> born <i>Sept. 29</i>	36
1767	Duke of <i>Kent</i> born <i>Nov. 2</i>	35
1768	Princess <i>Augusta-Sophia</i> born <i>Nov. 8</i>	34
1770	Princess <i>Elizabeth</i> born <i>May 22</i>	32
1771	Duke of <i>Cumberland</i> born <i>June 5</i>	31
1772	<i>Swedes</i> resign their Liberties to the King	30
1773	Prince <i>Augustus-Frederick</i> born <i>Jan. 27</i>	29
1773	The Light Gold recoined	29
1774	Prince <i>Adolphus Frederick</i> born <i>Feb. 24</i>	28
1775	War commenced against the <i>North-Americans</i>	27
1776	Princess <i>Mary</i> born <i>April 25</i>	26
1776	The <i>Americans</i> declare themselves independent	26
1777	Princess <i>Sophia</i> born <i>Nov. 3</i>	25
1778	The <i>French</i> sign a Treaty with the <i>Americans</i>	24
1778	War begun against the <i>French</i>	24
1779	War commenced against the <i>Spaniards</i>	23
1780	War against the <i>Dutch</i> begun	22
1783	A general Peace	19
1783	Princess <i>Amelia</i> born <i>Aug. 7.</i>	19

A.D.		Years since.
1783	New Volcanic Island appeared near <i>Iceland</i>	19
1783	More than 40,000 People perished by Earthquakes in <i>Italy</i>	19
1783	Peace with <i>France, Spain, and America</i> , concluded <i>Sept. 3</i>	19
1784	A general Peace concluded, <i>July 2</i>	18
1784	Seventeen Districts in <i>Iceland</i> desolated, by a subterraneous Fire	18
1786	Commercial Treaty with <i>France</i> signed <i>Sept. 26</i>	16
1788	His Majesty <i>George III.</i> seized with a dangerous Disorder	14
1789	<i>April 23</i> , the King, Royal Family, &c. went in State to <i>St. Paul's</i> , being a Day of General Thanksgiving for His Majesty's Recovery	13
1789	Revolution in <i>France</i>	13
1790	<i>Joseph II.</i> Emperor of <i>Germany</i> died <i>Feb. 20</i>	12
1790	<i>Henry Frederick</i> , Duke of <i>Cumberland</i> , died <i>Sept. 18</i>	12
1792	<i>Leopold</i> , Emperor of <i>Germany</i> , died <i>March 1</i>	10
1792	<i>Gustavus</i> , King of <i>Sweden</i> , shot by <i>Ankerstrom</i> , <i>March 16.</i> died <i>March 29</i> following	10
1792	War declared by <i>France</i> against the King of <i>Bohemia and Hungary</i> , <i>April</i>	10
1792	The <i>French</i> Monarchy altered to a Republic, <i>Sept.</i>	10
1793	The <i>French</i> King, <i>Louis XVI.</i> beheaded, <i>Jan. 21</i>	9
1794	The <i>French</i> defeated by Lord <i>Howe</i> , <i>June 1</i>	8
1796	Prince of <i>Wales</i> married, <i>April 8</i>	7
1797	<i>Spanish</i> Fleet defeated by Earl <i>St. Vincent</i> , <i>Feb. 14</i>	5
1797	Princess Royal married to the Duke of <i>Wirtemberg</i> , <i>May 18</i>	5
1797	<i>Dutch</i> Fleet defeated by Lord <i>Duncan</i>	5
1798	<i>French</i> Fleet destroyed by Lord <i>Nelson</i>	4
1801	<i>French</i> make a Peace with <i>Germany</i>	3

OF THE

ECLIPSES OF THE SUN AND MOON,

AND SOME OTHER

APPEARANCES IN THE HEAVENS,

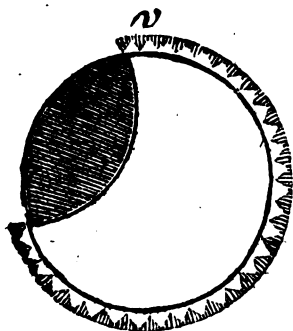
This Year, 1802.

THERE will be two Eclipses of the *Sun* within the limits of this year, and two of the *Moon*; and but one of each sort will be visible in these parts of the world. The first is a Solar Defect, on *Thursday*, the 4th day of *March*, at 55 min. past 4 in the morning, in $\text{R } 12^{\circ} 57'$, and the *Moon's* true latitude is $42' 20''$ South; therefore invisible in this kingdom, and all the Northern parts of the Globe: but in the Southern parts of the Earth this will be a great Eclipse, even so, that in $58 \text{ deg. } 20 \text{ min.}$ South Latitude, and $114 \text{ deg. } 7 \text{ min.}$ East Longitude from *London*, the inhabitants, if any such there be, will be surpris'd with a total and central Eclipse of the *Sun* at mid-day.

The second is a partial Eclipse of the *Moon*, on *Friday*, the 19th of *March*, at 6 min. past our 11 o'clock in the forenoon, therefore invisible to us. At the greatest obscuration of this Eclipse, the *Moon* is vertical just upon the Equator, in about 167 deg. of West Longitude from *London*; therefore it appears that this Eclipse will be visible in New Zealand, New Holland, and all along its Eastern Coast called New South Wales; at Otaheite, and all the Society Islands, the Friendly Islands, the Molucca Islands, those of Sunda, Sumatra, Borneo, Eastern Tartary, and the Eastern parts of Russia. The *Moon*, at the middle, will be $5^{\circ} 16'$ eclipsed on her North Side.

The third is an Eclipse of the *Sun*, on *Saturday*, the 28th of *August*, and visible here from *Sun* rise to the end, if clouds interpose not; for at *London* that morning, the *Sun* rises at 5 min. past 5 o'clock. The middle of the Eclipse, or time of the greatest obscuration, is at 19 min. past 5; when the *Sun* will

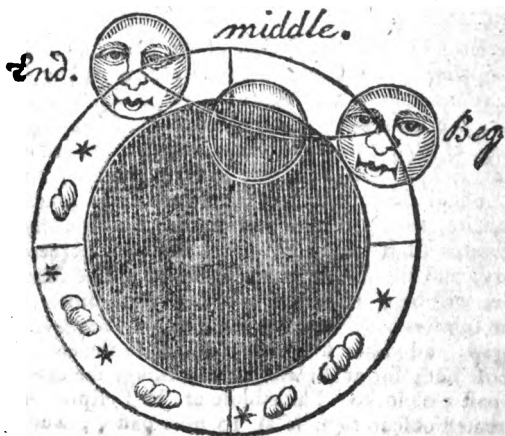
will be 4 digits 44 min. eclipsed ; the end of the Eclipse will be at 13 min. past 6, apparent time.



The annexed Type shows the the appearance expected at *London*, at the middle of the Eclipse, or soon after *Sun* rise, and will very well serve the whole Kingdom, *v*, the *Sun's* vertex.

The fourth and last of these Eclipses, is a partial one of the *Moon* ; and if the air proves clear, will be visible to us ; it happens on *Saturday* night, the 11th day of *September*. The time and manner of appearance in this Kingdom, may be expected nearly as follow.

A Type of the MOON's Eclipse.



September 11th, at night.

	London.		York.		Edinb.		
	h.	m.	h.	m.	h.	m.	
Eclipse begins	9	14	9	9	9	1	
Middle	10	39	10	34	10	26	app. time.
Ecliptic Conj.	10	46	10	41	10	33	
Eclipse ends	12	5	12	0	11	52	

..... Digits eclipsed, $9^{\circ} 12' 0''$

On *Tuesday*, the 9th day of *November*, there will be a Transit of *Mercury* over the *Sun's* Disk, and will appear like a black spot in it: He cannot be discovered by the naked eye, but may plainly be perceived by the help of an ordinary telescope. The time of his first entrance into the Disk will not be observed in any part of *Great Britain*, for the *Sun* will rise with the planet upon his face—and should the air prove clear, will be visible from *Sun* rise to his going off the Disk, which at *London* will be about noon; as appears by the following calculations made by Mr. *Andrews*, of *Royston*, in *Hertfordshire*, for *London*.

	d.	h.	'	"
Apparent time of the true $\odot$ 1802, Nov.	8	21	15	37
Longit. of $\odot$ and ♁ at the Ecliptic $\odot$	m	16	17	17
Aphelion of <i>Mercury</i> - - -	f	14	35	13
Ascending node of <i>Mercury</i> - - -	8	16	0	53
Inclination of the orbit of <i>Mercury</i> -			2	1 N.
Semidiameter of the <i>Sun</i> - - -			16	13
Ditto of <i>Mercury</i> - - -			0	4
Nearest approach of the centers of $\odot$ and ♁			0	56 N.
Angle of visible path of <i>Mercury</i> - - -		8 $^{\circ}$	22'	0"
Hourly motion of ♁ from $\odot$ - - -			12	37

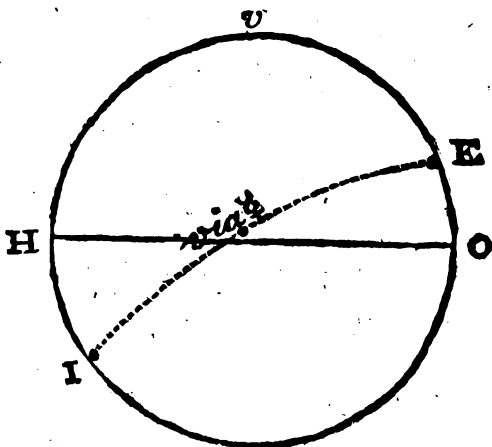
Logarithm dist. *Mercury* à $\odot$ = 4.496792

Log. of the dist. $\odot$ à $\odot$ = 4.995531

Log. dist. of $\odot$ from *Mercury* = 4.829889

♁ true Lat. à $\odot$ { when he first touches $1' 30''$ S.
 when he goes off the *Sun* $3' 16''$ N.

The Type of the Transit of MERCURY.



November 9th, in the morning.

	London.			Yerk.			Edinb.			
	h.	m.	s.	h.	m.	s.	h.	m.	s.	
Central Ingress	6	27	54	6	23	23	6	15	5	
Sun rises . . .	7	25	0	7	35	0	7	41	0	app. Time.
Middle . . .	9	14	15	9	9	44	9	1	26	
Ecliptic Conj. .	9	15	37	9	11	6	9	2	48	
Central Egress .	12	0	36	11	56	5	11	47	47	

Central Duration, 5 h. 32 m. 42 s.

Note. The Type is adapted to the City of London, and shews the track of Mercury from the Sun's rising to the end of the Transit, and will tolerably serve the whole Kingdom. Mercury you see enters on the left side of the Sun; but will appear to begin on the contrary side, when looked at through a telescope, which reverses. Mercury enters the Sun at I, and goes off at E. v, the Sun's vertex, or uppermost point. H O, an horizontal line.

Siderum Congressus.

On *Thursday*, the 21st day of *January*, at night, the *Moon* will eclipse the Planet *Jupiter*; and if the air proves clear, will be visible to us. The *Moon* will be seen approaching the Star very fast, for some time before the Immersion takes place, which will be at 2 min. past 9 o'clock, which will be a little to the left of the *Moon's* lowest point; and the Emerision will be at 9 min. past 10, when *Jupiter* will appear to come out from the dark part of the *Moon*, a little to the right of her uppermost point: after being hid 1 hour and 7 minutes.

On *Wednesday*, the 17th of *February*, at night, there will be another Occultation of the Planet *Jupiter* by the *Moon*, when the Star will appear near the lower point of the *Moon* (the *Moon* being at the full) and the Immersion takes place at 5 min. past 9 o'clock; and *Jupiter* will come out from behind the *Moon* at some distance to the right of the *Moon's* uppermost point, at 14 min. past 10; after being hid 1 hour and 9 minutes.

The next I shall mention, is another visible Occultation of *Jupiter* by the *Moon*, on *Tuesday*, the 13th of *April*, in the morning, when the Star will appear on the left side of the *Moon*, and *Jupiter* will enter under the dark edge of the *Moon* at 29 min. past 2 o'clock; and the Star will come out from behind the opposite and bright edge of the *Moon*, at 24 min. past 3 o'clock; after being hid 55 minutes. The calculations were made for the Meridian and Latitude of *London*, and according to apparent time. These may be seen by the naked eye, but will look more beautiful through a telescope.

Of the *FOUR QUARTERS* of the *YEAR* 1802;

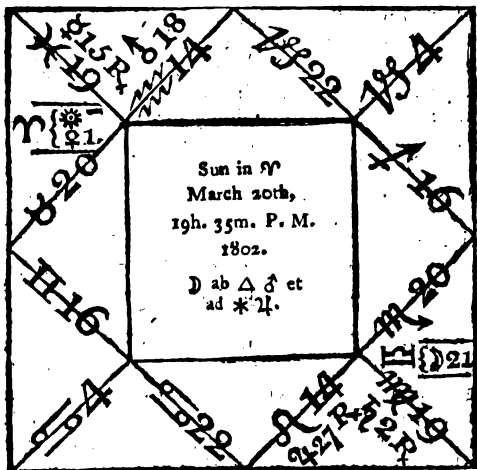
WITH A SUMMARY
VIEW OF THE POSITIONS AND INFLUENCES
OF THE
PLANETS therein.

Of the *SPRING QUARTER*.

THIS Quarter begins on *Sunday*, the 21st of *March*, at 35 min. past 7 in the morning, on which I shall make the principal

principal basis to raise my judgment upon for this Year's Revolution, when the Places of all the Planets and Cusps of the Houses are as represented in the following Scheme.

A SCHEME of the SUN's Ingress into ARIES.



In which are Positions of eminent Portents that will be attended with effects suitable to their natures. Here ♀ in ♍ in 8 of ♀, and ♀ in ♍ in 8 of ♀; and the two grand superior Planets are within Orbs of their ensuing Conjunction, which takes place the 16th of *July* following, at 7 in the morning; the Effects of this Conjunction has begun for some time, and will continue, more or less, for some time after this present year. It happens in ♍, the Horoscope of *France*, and will afflict its capital, *Paris*; it falls in a ☐ aspect of the place of the last Conj. in ♈, which is the ascendant of *Spain*, and in 8° of the Horoscope of *Portugal* and *Egypt*; these countries and places will feel its baneful effects and powerful influences, which will certainly convert and change things in the world, and the observations of all ages are testimonies sufficient to confirm it: nay, even in our own age, we have been witnesses that very eminent Transactions have succeeded

ceeded such Celestial congresses. I will here mention them for a century back—1702, a ♄ in ♈; 1722, a ♄ in ♈; 1742, a ♄ in ♎; 1762, a ♄ in ♈; 1782, a ♄ in ♈; and now in 1802, a ♄ in ♎; all the former was in the Fiery Triplicity, and this last in the earthly; where ♄ has his detriment; and ♈ is wholly peregrine. It is well known to all *Europe*, that many eminent changes and contentions, with wars and bloodshed, have happened since the last *Conjunction* in 1782, which perhaps but few ages can parallel. *France* is still very active both in preparing levies of men for recruiting her armies, and also as prudently consulting how to manage her not altogether thriving affairs; for Providence doth not seem at all times to prosper her begun enterprizes. Our work I doubt is not finished; in some countries it is but just begun; and in some a foundation is laid for acting of greater matters, when time and opportunity offers. *Italy, France, Germany, Spain, Portugal, Russia, Sweden, and Denmark*, with *Holland and Prussia*, &c. are all concerned. The *Turks* seem to be spirited up to action against a particular Power, but the Stars bespeak them no good success; they will have enough upon their hands.

THE SUMMER QUARTER.

This Quarter begins on *Thursday*, the 22d of *June*, at 27 min. past 5 in the morning; when 21 degrees of ♈ culminate, and the 20th degree of ♎ ascend in the East. The ☉ is located in the 12th House, ♀ and ☿ in the 1st or ascendant. ♈ and ♄ in the 3d House, the planet ♈ in ♈, on the Cusp of the 11th, the ♃ is in the m. c. in ♎ of ♀ and next applying to a ♎ of ☿. Thus stands the Face of the Heavens at this Solar Ingress. Here is an appearance of *Treaties* offered, *Ambassadors* sent from one country to another; and some talk of a *Peace* going forward, when I doubt nothing less is thought of, but to gain time or advantages. In this Quarter falls the grand *Conjunction* of the two superior Planets, ♈ and ♄ in the earthly sign *Virgo*; it is a *Conjunction* that forbodes many commotions and troubles, with desolations of every kind; and to render this *Conjunction* the more powerful, there follows it an *Eclipse* of the *Sun*, in the very sign and degree thereof; which together signifies the sickness or death of some eminent or great man; it also signifies a scarcity of the fruits of the Earth. I hope our nation and country may be free; but as some of these things will fall particularly on

France, we who have been so long at war with that Power, and are not yet free from broils and discords, cannot expect but in a degree to share in the malignant influences of these configurations of the Heavenly Bodies; for I judge no small and trivial matters to succeed it, or to fall out near this time.

THE AUTUMN QUARTER.

This Quarter begins on *Thursday*, the 23^d of *September*, at 8 min. past 7 at night. when 9 degrees of γ ascends, and 16 degrees of ν is on the M. C. The Δ ab $\square$ φ ad $\ast$ δ , the Planets are all under the Earth, except φ , which is just setting in the West; η and μ in M within 7 degrees of each other, and δ in Π , *London's* ascendant, but in a $\square$ of the two superiors *Saturn* and *Jupiter*; therefore it shews the affairs and particulars of this Quarter will be various, and of high concernment both to us, and to the *French*, and to other *European* Powers. I fear great losses and disappointments to ———, and other parts of the nation. I fear mortalities amongst men and cattle; together with beggary and want to many countries. It denotes consumptions, tedious and continued agues and other diseases; also dissimulation and dulness in the magistracy; heresies in the clergy and church; with a change of laws and customs, and the like.

THE WINTER QUARTER.

This Quarter enters when the *Sun* comes to the Tropick of *Capricorn*, which this year happens on *Wednesday*, the 22^d of *December*, at 51 min. past 11 in the morning; at this Ingress η and μ are in a $\square$ aspect of δ , which are Configurations of a hostile and rugged import; they signify robberies, murders, and other outrageous proceedings; I fear our tranquil days are not so near at hand as might be wished; there seems still a snake in the grass! more briers and thorns must be cut down, before a lasting peace, I doubt, can be expected; though nevertheless, something of that sort is again talked of, and brought upon the carpet.—*Kivat Rex.*

F I N I S.

Printed for the COMPANY of STATIONERS,

By G. WOODFALL, No. 22, Paternoster-Row, London.

ἈΤΛΑΣ ΟΥΡΑΝΙΟΣ,
The COELESTIAL ATLAS;

OR, A NEW
EPHEMERIS

For the YEAR of our LORD 1802.

Being the Sixth after

BISSEXTILE, or LEAP-YEAR,

And the Second Year of the 19th Century.

Wherein are contained

The Heliocentrick and Geocentrick Places of the Planets,
the ECLIPSES of the Luminaries, and other remarkable PHENO-
MENA that will happen this Year.

Carefully computed

From the genuine TABLES of Dr. EDMUND HALLEY,
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ASTRONOMICAL TABLES.

ALSO

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of the Church of ENGLAND; the Times of the LUNATIONS;
the Rising and Setting of the Sun, Moon, and Planets, &c.

Adapted to the

Meridian and Latitude of the Royal Observatory of
GREENWICH.

To which are added

Several useful TABLES: As, a TABLE of the Sun's
semi diurnal Arcs, by which the Times of the Sun's Rising and
Setting may be known by Inspection, on every Day of the Year, and
in any Part of GREAT-BRITAIN or IRELAND; a TABLE,
and a very correct one of the Eclipses of the Sun and Moon, and a TABLE;
a TABLE of the Sun's Right-Ascension; and a TABLE of the
of the most remarkable fixed Stars, corrected from the latest
and other Catalogues; and, lastly, a correct TABLE of Latitudes
and Longitudes of the most remarkable Places in the World.

By ROBERT WHITE,

Teacher of the Mathematicks.

Οἱ ἀγαθοὶ διηγουμένοι δὲ τὰν Θέσιν.

The FIFTY-THIRD IMPRESSION.

L O N D O N:

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And sold by G. GREENHILL, at their Hall, near Ludgate street.

[Price ONE SHILLING and NINE PENCE stitched.]

Chronological Notes for the Year 1802.

Golden Number	- - 17	Septuagesima Sund,	Feb. 14
Cycle of the Sun	- - 19	Shrove Sunday	- Feb. 28
The Epact	- - - 26	Easter Day	- - Apr. 18
Dominical Letter	- C	Whit Sunday	- June 6
Number of Direction	- 28	Trinity Sunday	- June 13
Roman Indiction	- - 5	Advent Sunday	- Nov. 28

Astronomical CHARACTERS explained.

♈ Aries	♋ Cancer	♎ Libra	♏ Capricorn
♉ Taurus	♌ Leo	♍ Scorpio	♐ Aquarius
♊ Gemini	♍ Virgo	♏ Sagittary	♑ Pices

♄ Saturn	☉ Sol (the Sun)	☾ Luna (the Moon)	♃ Herschel,
♃ Jupiter	♀ Venus	♊ Moon's N. Node	the New or
♂ Mars	☿ Mercury	♋ her S. Node	Georgian Planet.

♄ Conjunction when Planets are in the same Sign, Deg. Min. &c.

* Sextile when 2 Signs dist. | Δ Trine when 4 Signs dist.

□ Quartile when 3 Signs dist. | ⚡ Opposition when 6 Signs dist.

Of the Four Quarters of the YEAR 1802.

	d	h	m
THE Spring Quarter begins	- - March 21	7	35 morn.
The Summer Quarter begins	- - June 22	5	27 morn.
The Autumnal Quarter begins	- - Sept. 23	7	8 aftern.
The Winter Quarter begins	- - Dec. 22	11	51 morn.

THE beautiful Planet VENUS will be a Morning Star till March the 17th; and after that Time she will be an Evening Star to the Year's End.

JUPITER will be an Evening Star till September the 9th; at which Time he becomes a Morning Star, and so continues to the Year's End.

The NAMES of the Learned JUDGES of the LAW.

I. Right Hon. Lord Eldon, Lord High Chancellor of Great Britain.

Right Hon. Sir William Grant, Knt. Master of the Rolls.

II. In the } Right Hon. Lord Kenyon, L. C. J. Sir Simon Le Blanc, Knt.
K. Bench. } Sir Soulden Lawrence, Knt. Sir Nath. Grose, Knt.

III. In the } Right Hon. Lord Alvanley, L. C. J. Sir Giles Rooke, Knt.
C. Pleas. } John Heath, Esq. Sir Alan Chambre, Knt.

IV. In the } Sir Arch. Macdonald, Kt. L. C. B. Sir Beaumont Hotham, Kt.
Exchequer } Sir Alex. Thompson, Knt. Sir Robert Graham, Knt.

Sir Edward Law, Knt. Attor. Gen. Hon. Spencer Percival, Solicitor Gen.

A TABLE of TERMS and Returns for the Year 1802.

Hilary Term begins Jan. 23, ends Feb. 12.

Returns or Essoign-days.		Exc.	Ret.	Ap.	W. D.
In eight Days of St. Hilary,	- - Jan. 20	21	22	23	Saturday
In fifteen Days of St. Hilary	- - - 27	28	29	30	Saturday
On the Mor. of the Purif. of the Bl. V. M.	Feb. 3	4	5	6	Saturday
In eight Days of the Purif. of the Bl. V. M.	9	10	11	12	Friday

Easter Term begins May 5, ends May 31.

In fifteen Days of Easter	- - May 2	3	4	5	Wedn.
From Easter Day in three Weeks	- - - 9	10	11	12	Wedn.
From Easter Day in one Month	- - - 16	17	18	19	Wedn.
From Easter Day in five Weeks	- - - 23	24	25	26	Wedn.
On the Mor. of the Ascension of the Lord	28	29	30	31	Monday

Trinity Term begins June 18, ends July 7.

On the Morrow of the Holy Trinity,	- June 14	15	16	18	Friday.
In eight Days of the Holy Trinity,	- - - 20	21	22	23	Wedn.
In fifteen Days of the Holy Trinity,	- - - 27	28	29	30	Wedn.
From the Day of the Holy Trin in 3 W.	July 4	5	6	7	Wedn.

Michaelmas Term begins Nov. 6, ends Nov. 28.

On the Morrow of All Souls	- - - Nov. 3	4	5	6	Saturday
On the Morrow of St. Martin	- - - 12	13	14	16	Tuesday
In eight Days of St. Martin	- - - 18	19	20	21	Monday
In fifteen Days of St. Martin	- - - 25	26	27	28	Monday

N. B. No Sittings in Westminster-Hall on the Second of February, Ascension-day, and Midsummer-day.

The Exchequer opens eight Days before any Term begins, except Trinity, before which it opens but four Days.

Note, The first and last Days of every Term, are the first and last Days of Appearance.

BIRTH-DAYS of the ROYAL FAMILY.

KING GEORGE III. June 4, 1738	Prince Adolph. Fred. Feb. 24, 1774
Prince of Wales, Aug. 12, 1762	Princess Mary, April 25, - 1776
Duke of York, August 16, 1763	Princess Sophia, Nov. 3, - 1777
Duke of Clarence, Aug. 21, 1765	Princess Amelia, Aug. 7, - 1783
Ds. of Wirttemberg, Sept. 27, 1766	Queen Charlotte, May 19, 1744
Duke of Kent, Nov. 2, - 1767	Duchess of Brunswick, Aug. 11, 1737
Mrs. Augusta Sophia, Nov. 8, 1768	Duke of Gloucester, Nov. 25, 1743
Mrs. Elizabeth, May 22, - 1770	Princess of Wales, May 17, 1768
Duke of Cumberland, June 5, 1771	Duchess of York, May 7, 1767
Prince Aug. Fred. Jan. 27, 1773	

SOVEREIGNS OF EUROPE, their Accession, &c.

Kingdoms, &c.	To whom subject.	When born.	Began to reign.
England, &c.	George III.	June 4, 1738	Oct. 25, 1760
Russia	Alexander	Dec. 23, 1777	Mar. 24, 1801
Spain	Charles IV.	Nov. 11, 1748	Dec. 17, 1788
Portugal	Peter and Mary	Dec. 7, 1734	Feb. 24, 1777
Prussia	Frederic Wm. III.	Aug. 6, 1770	Nov. 16, 1797
Denmark & Norway	Christian VII.	Jan. 29, 1749	Jan. 14, 1766
Sweden	Gustavus IV.	Nov. 1, 1778	Mar. 29, 1792
Germany	Francis II.	Feb. 12, 1767	Mar. 1, 1792
Papedom	Pius VII.	Aug. 11, 1742	Mar. 14, 1800
Sardinia	Charles-Emanuel	May 24, 1751	Oct. 16, 1796
Ottoman Empire	Selim III.	July 17, 1761	April 7, 1789

The FULL WEIGHT of the Coins, with the LEAST WEIGHT allowed to pass of the Gold Coin.

Wt. allowed.	Full Wt.		Full Wt.
GOLD. dwt. gr.	dwt. gr.	SILVER:	dwt. gr.
Guinea, - - 5 8	5 9 $\frac{39}{9}$	A Crown, - - -	19 8 $\frac{16}{31}$
Half Guinea, - 2 16	2 16 $\frac{64}{9}$	Half Crown, - -	9 16 $\frac{8}{31}$
Seven Shillings, 1 19	1 19 $\frac{13}{9}$	Shilling, - - -	3 20 $\frac{28}{31}$
		Six Pence, - - -	1 22 $\frac{14}{31}$

According to the above proportions it appears, that the value of a lb. of silver is 62s. or 3l. 2s. and of a lb. of gold is 44½ guineas, or 46l. 14s. 6d. Also that the oz. of silver is 5s. 2d. and the oz. of gold 3l. 17s. 10½d. So that the value of the standard gold is 15 times that of the silver, and 1-14th more.

A TABLE of the KINGS and QUEENS of ENGLAND since the CONQUEST.

Kings and Queens	Born A.D.	Began their Reign	Reigned Y. M. D.	Age	Rem. Deaths and Dethroned	Where buried
Will. Conq.	1027	1066 Oct. 14	20 10 26	60	Burst by Leap. Slain accidentally.	Caen, Norm
Will. Rufus	1057	1087 Sept. 9	12 10 24	43		Winchester
Henry I.	1068	1100 Aug. 2	35 3 29	77		Reading
Stephen	1105	1135 Dec. 1	18 10 24	49		Feverham
Henry II.	1133	1154 Oct. 25	34 8 11	55	Slain with an Arrow.	Fonteveraud
Richard I.	1156	1189 July 6	9 9 0	43		Fonteveraud
John	1165	1199 April 6	17 6 13	50		Worcester
Henry III.	1207	1216 Oct. 19	56 0 28	65		Westminster
Edward I.	1230	1272 Nov. 16	34 7 21	67		Westminster
Edward II.	1284	1307 July 7	19 6 18	43	Dep. & murd.	Gloucester
Edward III.	1312	1327 Jan. 25	50 4 27	65		Westminster
Richard II.	1366	1377 June 21	22 3 8	33		Westminster
Henry IV.	1367	1399 Sept. 29	13 5 20	46	Dep. & murd.	Canterbury
Henry V.	1389	1413 Mar. 20	9 5 11	33		Westminster
Henry VI.	1421	1422 Aug. 31	38 6 4	49		Windfor
Edward IV.	1442	1461 Mar. 4	22 1 5	41	Murder'd. Slain in Battle.	Windfor
Edward V.	1471	1483 April 9	0 2 15	12		Not known
Richard III.	1443	1483 June 22	2 2 0	42		Leicester
Henry VII.	1456	1485 Aug. 22	23 8 0	52		Westminster
Henry VIII.	1492	1509 April 22	37 9 6	55		Windfor
Edward VI.	1537	1547 Jan. 28	6 5 8	15		Westminster
Mary I.	1516	1553 July 6	5 4 11	42		Westminster
Elizabeth	1533	1558 Nov. 17	44 4 7	69		Westminster
James I.	1566	1603 Mar. 24	22 0 3	58	Beheaded.	Westminster
Charles I.	1600	1625 Mar. 27	23 10 3	48		Windfor
Charles II.	1630	1649 Jan. 30	36 0 7	54	Abdicated.	Westminster
James II.	1633	1685 Feb. 6	4 0 7	67		St. Germain
Mary II.	1662	1689 Feb. 13	5 10 15	32		Westminster
William III.	1650	1689 Feb. 13	13 0 23	52		Westminster
Anne	1665	1702 Mar. 8	12 4 24	49		Westminster
George I.	1660	1714 Aug. 1	12 10 10	67		Hanover
George II.	1682	1727 June 11	33 4 14	77		Westminster
George III.	1738	1760 Oct. 25	Crowned Sept. 2 2, 1761.			

Above you view the Rise and Fall of Kings,
Whose Fate sometimes a useful Lesson brings.
Well if all Men could profit from the past!
Each know his Duty, each excel the last,
And justly execute his stated Task.

A TABLE of the most Reverend, Right Reverend, and Reverend, the ARCH-BISHOPS, BISHOPS and DEANS, exercising Ecclesiastical Jurisdiction, 1802.

BISHOPS.	Sees.	Date.	Succeeded.	DEANS.
Dr. John Moore	<i>Banger</i>	1775	Ewer deceased	
Arch-Bishop	<i>Canterb. A. B.</i>	1783	Cornwallis dec.	Dr. Powys
Dr. Will. Markham	<i>Chester</i>	1771	Keene transl.	
Arch-Bishop	<i>York A. B.</i>	1777	Drummond de.	Dr. J. Fountayne
Dr. Beilby Porteus	<i>Chester</i>	1776	Markham tran.	
	<i>London.</i>	1787	Lowth decaff.	Bishop Pretyman
	<i>Lindoff</i>	1769	Shipleigh transl.	
Hon. Dr. S. Barrington	<i>Salisbury</i>	1782	Hume dec.	
	<i>Durham</i>	1791	Thurlow dec.	Bishop Cornwallis
	<i>Litch. & Cov.</i>	1771	Egerton transl.	
Hon. Dr. B. North	<i>Worcester</i>	1774	Johnson decaff.	
	<i>Winchester</i>	1781	Thomas decaff.	Dr. Newton Ogle
Dr. Charles Mofs	<i>St. David's</i>	1766	Lowth transl.	
	<i>Bath & Wells</i>	1774	Willes decaff.	Dr. Geo. W. Lukin
	<i>St. David's</i>	1774	Mofs transl.	
H. Dr. James Yorke	<i>Gloucester</i>	1779	Warburton dec.	
	<i>Ely</i>	1781	Keene decaffed	Dr. Wm. Pearce
Dr. Richard Hurd	<i>Litch. & Cov.</i>	1775	B. North tr.	
	<i>Worcester</i>	1781	B. North tr.	Dr. Ar. Onslow
Dr. John Butler	<i>Oxford</i>	1777	Lowth transl.	
	<i>Hereford</i>	1788	Harley decaff.	Dr. N. Wetherell
Dr. J. Cornwallis	<i>Litch & Cov.</i>	1781	Huid transl.	Dr. Bapt. Proby
	<i>Bristol</i>	1782	Newton dec.	
Dr. Lewis Bagot	<i>Norwich</i>	1783	Yonge dec.	
	<i>St. Asaph</i>	1790	Hallifax dec.	Mr. W. D. Shipley
Dr. Richard Watson	<i>Landaff</i>	1782	Barrington tr.	Mr. S. Gale, Prec.
Dr. G. Pretyman	<i>Lincoln</i>	1787	Thurlow tran.	Sir Ri. Kaye, Bt.
Dr. John Douglas	<i>Carlisle</i>	1787	Law dec.	
	<i>Salisbury</i>	1791	Barrington tra.	Dr. John Ekins
Dr. Samuel Horsley	<i>St. David's</i>	1788	Smalwell tr.	
	<i>Rochester</i>	1793	Thomas dec.	Dr. T. Dampier
	<i>Chester</i>	1788	Porteus tran.	
Dr. Wm. Cleaver	<i>Bangor</i>	1800	Warren dec.	Mr. John Warren
Dr. Richard Beadon	<i>Gloucester</i>	1789	Hallifax tran.	Dr. John Luxmore
Dr. E. V. Vernon	<i>Carlisle</i>	1791	Douglas transl.	Dr. Isaac Milner
Dr. Charles Sutton	<i>Norwich</i>	1792	Horne decaff.	Dr. Joseph Turner
	<i>Bristol</i>	1792	Bagot transl.	
Dr. Spencer Madan	<i>Peterborough</i>	1794	Hinchliffe dec.	Dr. Tho. Kipling
	<i>Bristol</i>	1794	Madan transl.	
Dr. Regi. Courtenay	<i>Exeter</i>	1797	Bulter dec.	Dr. C. Harward
Dr. F. H. W. Cornwall	<i>Bristol</i>	1797	Courtenay tra.	Dr. C. P. Layard
Dr. John Buckner	<i>Chichester</i>	1797	Ashburnham d.	Mr. Combe Miller
Dr. John Randolph	<i>Oxford</i>	1799	Smalwell dec.	Dr. Cyril Jackson
Dr. H. W. M. Jendie	<i>Chester</i>	1800	Cleaver tran.	Dr. G. Cotton
Lord Geo. Murray	<i>St. David's</i>	1800	Stuart transl.	Mr. Wollaston, P.
	<i>Winchester</i>	1793	Thomas dec.	Bishop Horsley
	<i>Windsor</i>	1788	Douglas prom.	Bishop Sutton
Dr. Crigan	<i>Sodor and Man</i>			

IN the course of this year there will happen four eclipses, two of each luminary, but only one of each will be visible in these parts.

I. *March 4*, the Sun is eclipsed, but not visible in these northern parts of the globe. The conjunction is at 4h 55m, in the morning, in longitude $11^{\circ} 12' 57''$, the moon's latitude being $42\frac{1}{2}'$ south.

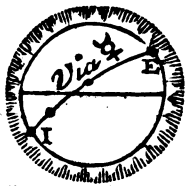
II. *March 19*, the Moon is eclipsed, but invisible here. The beginning is at 9h 54m in the morning; the middle of the eclipse 11h 6m; the ecliptic opposition at 11h 15m; end of the eclipse $22\frac{1}{2}$ h after 12; digits eclipsed $5^{\circ} 16'$ on the north side of the moon.

III. *August 28*, the Sun is eclipsed, and partly visible, as the Sun rises eclipsed at 5h 7m; the visible conjunction is at 5h 17m morning, the greatest obscuration 5h 19m; and the eclipse ends at 6h 13m; the digits eclipsed being $4^{\circ} 44'$ on the sun's north side.

IV. *September 11*, the Moon is eclipsed, and visible here if clouds intervene not. The eclipse begins at 9h $13\frac{1}{2}$ m afternoon; middle of the eclipse 10h $39\frac{1}{4}$; the ecliptic opposition 10h $45\frac{1}{4}$ n; end of the eclipse is 5m past midnight; and the digits eclipsed $9^{\circ} 12'$ on the moon's south side.

Beside these eclipses, there will be a transit of the planet Mercury over the Sun's disc, and several notable occultations of the planets by the moon.

Transit of Mercury. *November 9* in the morning there happens a remarkable transit of the planet Mercury over the face of the Sun, passing over it like a small round black speck, and will be visible here if clouds interpose not. The beginning of this transit will be seen as far as the East Indies, New Holland, New Zealand, &c. the middle will be seen in all Africa, and most part of Europe and Asia; and the end will extend as far westward as Cape Horn, South America, and most of the West India islands. The annexed type shows the appearance or path for London, where the Sun rises, with Mercury on his face, at 7h 26m in the morning; the transit begins on the left hand at I, at 6h 28m; the middle at 9h 14m; and the end, at E, at 12h 1m, or 1m afternoon. The figure shows the appearance for the naked eye, using a darkened glass to defend it against the Sun's beams. In a telescope that reverses, the sides will be reversed.



Obliquity of the Ecliptic,	1802.	Equation of Equinoctial Points.
$23^{\circ} 27' 59''.5$	January 1,	- +1".7
$23^{\circ} 28' 0''.2$	April 1,	- +3. 2
$23^{\circ} 27' 59''.0$	July 1,	- +4. 7
$23^{\circ} 27' 59''.6$	October 1,	- +6. 1
$23^{\circ} 27' 58''.1$	Decemb. 31,	- +7. 6

The LUNATIONS.

New Moon the 4th day, at 8 minutes past 8 morning.

First quarter the 10th day, at 4 minutes past 12 midht.

Full Moon the 18th day, at 48 minutes past 9 night.

Last quarter the 27th day, at 3 minutes bef. 1 morning.

M	Sundays & other D) remark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ fouth	☽ lock bef. ☉	
1	Circumcision	8 4	3 56	23 3	24 59	5 11 3	9 11	3' 48'	
2		8 4	3 56	22 58	27 40	6 3	10 1	4 16	
3	2 Sun. af. Chri.	8 3	3 57	22 53	28 27	7 52	11 6	4 44	
4		8 2	3 58	22 47	27 9	☽ sets	0 13	5 12	
5		8 2	3 58	22 40	23 57	☽ a 15	1 17	5 39	
6	Epiphany	7 59	3 59	22 34	18 54	6 51	2 16	6 6	
7	[O. Chr. D	8 0	4 0	22 26	12 53	8 24	3 10	6 33	
8	Lucian	7 59	4 1	22 17	6 17	9 50	3 59	6 59	
9		7 58	4 2	22 10	0 26	11 15	4 46	7 24	
10	1 S. aft. Epiph.	7 57	4 3	22 2	6 57	morn	5 37	7 49	
11	Plow Mo. day	7 56	4 4	21 51	12 58	0 35	6 17	8 13	
12		7 55	4 5	21 43	18 18	1 5	7 4	8 37	
13	Hilary:Ca.T.b	O.N.D	4 6	21 33	22 38	3 14	7 53	9 0	
14	Oxford Ter. b.	7 53	4 7	21 23	25 52	4 33	8 44	9 22	
15		7 52	4 8	21 12	27 53	5 43	9 36	9 44	
16		7 50	4 10	21 1	23 30	6 45	10 28	10 5	
17	2 Sun. s. Epiph.	7 49	4 11	20 50	27 45	7 32	11 19	10 25	
18	Q. Char. b. d. k.	7 48	4 12	20 38	25 44	☽ rises	morn	10 44	
19	[Prisca	7 46	4 14	20 25	22 35	4 a 41	0 8	11 3	
20	Fabian	7 45	4 15	20 13	18 31	5 52	0 51	11 21	
21	Agnes	7 44	4 16	20 0	13 45	7 5	1 37	11 38	
22	Vincent	7 42	4 18	19 46	8 27	8 15	2 18	11 55	
23	Hil. Term beg.	7 41	4 19	19 32	2 50	9 26	2 58	12 11	
24	3 Sun. s. Epiph.	7 39	4 21	19 18	2 s 57	10 38	3 37	12 26	
25	Con. of St. Paul	7 38	4 22	19 4	8 43	11 52	4 17	12 40	
26		7 36	4 24	18 49	14 18	morn	5 0	12 54	
27	Fr. Au. Fred. b.	7 34	4 26	18 34	19 25	1 10	5 46	13 6	
28		7 33	4 27	18 18	23 45	2 33	6 36	13 18	
29		7 31	4 29	18 2	26 55	3 58	7 33	13 29	
30	K. Cha. I. mar.	7 30	4 30	17 46	28 29	5 18	8 34	13 39	
31	4 S. aft. Epiph.	7 28	4 32	17 30	28 6	6 25	9 40	13 49	
Days	Day increaf.	Length of Day.	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	h rises
1	0 8	7 52	21 11	27 0	5 2	10 27	27 m 7	20 m 46	8 46
7	0 16	8 0	2 24	27 28	8 16	16 34	9 40	7 32	8 20
13	0 28	8 12	2 37	27 56	11 32	22 41	16 12	24 2	7 54
19	0 44	8 28	2 50	28 21	14 50	28 48	25 43	11 2	7 28
25	1 0	8 44	3 2	28 52	18 10	4 54	5 13	29 20	7 3

Day	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1	5 59	6 1	2 6	24 33	1 n 44	1 6	0 s 20	0 n 28	0 s 12
7	5 56	6 4	2 4	24 14	1 45	1 8	0 24	0 13	0 52
13	5 52	6 8	2 2	23 58	1 46	1 10	0 2	0 s 2	1 26
19	5 46	6 14	2 0	23 36	1 48	1 11	0 32	0 12	1 50
25	5 30	6 21	1 58	23 17	1 49	1 12	0 36	0 31	2 3
Day	☉'s longitude		☽'s long.	☽'s latitude	h's long.	u's long.	♂'s long.	♀'s long.	♂'s long.
1	10 20	50	1 10	4 s 39	7 18 13	3 39	18 55	22 14	25 13
2	11 28	12	15 45	4 5	7 16	5 3	19 30	23 29	26 42
3	12 27	23	20 39	5 0	7 14	5 35	20 23	24 44	28 12
4	13 30	3	15 48	4 3	7 11	5 32	21 7	25 59	29 43
5	14 31	50	15 2	3 50	7 10	5 29	21 51	27 11	31 14
6	15 33	2	16 10	3 2	7 8	5 28	22 35	28 20	2 45
7	16 34	14	1 3	1 57	7 6	5 23	23 19	29 45	4 17
8	17 35	26	15 35	0 39	7 4	5 1	24 3	31 0	5 46
9	18 36	36	29 42	0 n 36	7 2	5 1	24 4	2 13	7 21
10	19 37	46	13 24	1 4	7 0	5 1	25 31	3 31	8 53
11	20 38	55	16 44	2 5	6 57	5 9	26 1	4 46	10 23
12	21 40	3	9 43	3 45	6 55	5 5	26 59	6 1	12 2
13	22 41	11	12 25	4 23	6 52	5 1	27 43	7 17	13 36
14	23 42	18	4 51	4 5	6 49	4 56	28 17	8 32	15 14
15	24 43	27	17 12	5 3	6 46	4 52	29 12	9 47	16 47
16	25 44	28	29 21	5 2	6 43	4 47	29 56	11 3	18 23
17	26 45	33	11 23	4 48	6 40	4 42	30 41	12 18	20 0
18	27 46	36	23 20	4 21	6 3	4 37	1 25	13 35	21 37
19	28 47	39	55 13	3 45	6 34	4 32	2 10	14 49	23 14
20	29 48	41	17 3	2 5	6 31	4 26	2 54	16 4	24 57
21	0 49	42	18 52	1 50	6 27	4 21	3 31	17 1	26 37
22	1 50	43	10 42	0 50	6 24	4 15	4 2	18 3	28 10
23	2 51	43	22 38	0 s 6	6 20	4 10	5 8	19 50	29 50
24	3 52	43	4 42	1 11	6 17	4 4	5 52	21 5	31 31
25	4 53	42	16 53	2 13	6 13	3 58	6 17	22 20	3 17
26	5 54	40	29 32	3 11	6 9	3 51	7 21	23 35	4 54
27	6 55	37	12 12	4 1	6 5	3 45	8 6	24 50	6 37
28	7 56	35	25 50	4 39	6 1	3 38	8 51	26 5	8 20
29	8 57	31	9 40	5 3	5 57	3 32	9 36	27 21	10 4
30	9 58	26	23 59	5 10	5 53	3 25	10 21	28 36	11 49
31	10 59	21	8 45	4 56	5 49	3 19	11 6	29 51	13 34
Days	u's rises	♂'s rises	♀'s rises	♂'s rises	h's declin.	u's declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	8 a 46	6 m 12	6 m 44	7 m 3	10 n 27	10 n 2	23 s 21	22 s 46	23 s 35
7	8 17	6 28	6 53	7 20	10 12	10 36	23 42	23 15	24 16
13	7 49	6 23	7 3	7 35	10 39	10 46	23 55	23 18	24 12
19	7 21	6 17	7 7	7 50	10 47	10 58	23 5	22 56	23 16
25	6 53	6 11	7 17	7 54	10 56	11 11	23 54	22 8	21 28

The LUNATIONS.

New Moon the 2d day, at 34 minutes past 6 afternoon

First quarter the 9th day, at 1 minute past 2 afternoon.

Full Moon the 17th day, at 8 minutes past 5 afternoon

Last quarter the 25th day, at 49 minutes past 1 afternoon

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾rises & sets	☾ south	Clock bef. ☉	
1		7 26	4 34	17 5 13	25 5 39	7 m 12	10 m 44	13' 58"	
2	2^d Pur. or Cand. L.	7 25	4 35	16 56	21 21	☾ sets	11 48	14 5	
3	Blaise	7 23	4 37	16 38	15 36	5 a 41	0 a 46	14 12	
4		7 21	4 39	16 20	8 59	7 15	1 39	14 19	
5	Agatha	7 19	4 41	16 2	2 0	8 42	2 29	14 24	
6		7 18	4 42	15 44	4 n 53	10 7	3 17	14 29	
7	C 5 Sun. a. Epiph.	7 16	4 44	15 26	11 20	11 31	4 5	14 32	
8		7 14	4 46	15 7	17 2	morn	4 53	14 35	
9		7 12	4 48	14 48	21 47	0 54	5 43	14 37	
10		7 10	4 50	14 28	25 23	2 13	6 34	14 38	
11		7 9	4 51	14 9	27 41	3 29	7 27	14 39	
12	Hilary Ter. ends	7 7	4 53	13 49	28 37	4 35	8 19	14 39	
13	C Septuagesima S.	7 5	4 55	13 29	28 10	5 26	9 11	14 37	
14	[Vale: O. Can.]	7 3	4 57	13 9	26 25	6 7	10 1	14 35	
15		7 1	4 59	12 49	23 31	6 33	10 48	14 33	
16		6 59	5 1	12 28	19 38	6 53	11 32	14 29	
17		6 57	5 3	12 7	14 59	☾rises	morn	14 25	
18		6 55	5 5	11 46	9 46	5 a 50	0 15	14 20	
19		6 53	5 7	11 25	4 10	7 14	0 55	14 15	
20		6 52	5 8	11 3	1 s 38	8 25	1 35	14 9	
21	☉ Serapeus Sun.	6 50	5 10	10 42	7 27	9 40	2 15	14 1	
22		6 48	5 12	10 20	13 4	10 57	2 57	13 54	
23	[Ad. Fr. born]	6 46	5 14	9 58	18 16	morn	3 42	13 46	
24	S. Blasius: Pr	6 44	5 16	9 36	22 46	0 18	4 30	13 37	
25	Ca. T. div. m.	6 42	5 18	9 14	26 13	1 40	5 23	13 28	
26		6 40	5 20	8 52	28 16	3 2	6 21	13 18	
27	☉ Shrove Sunday	6 38	5 22	8 20	28 35	4 12	7 23	13 8	
28		6 36	5 24	8 7	27 0	5 5	8 26	12 57	
29									
30									
Days	Day increaf.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	h rises
1	1 24	9 8	3 m 17	24 25	22 1 5	12 0	16 17	23 36	6 a 32
7	1 41	9 28	3 30	29 52	25 30	18 5	25 46	18 18	6 6
13	2 6	9 50	3 43	0 m 20	28 56	24 5	35 15	17 52	5 40
19	2 30	10 14	3 56	0 48	25 24	0 m 12	14 41	22 38	5 14
25	2 52	10 36	4 8	1 16	5 55	6 14	24 13	0 18	4 47

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1	5 30	6 29	1 55	22 X 55	1 n 50	1 n 14	0 s 41	0 s 46	2 s 1
7	5 22	6 38	1 54	22 36	1 51	1 15	0 45	0 58	1 39
13	5 12	6 48	1 53	22 17	1 52	1 15	0 48	1 7	0 55
19	5 1	6 59	1 52	21 54	1 53	1 10	0 52	1 15	0 n 14
25	4 50	7 10	1 52	21 38	1 51	1 16	0 56	1 21	1 40
Days	☉'s longitude	☽'s long.	☽'s latitude	h's long.	u's long.	♂'s long.	♀'s long.	♂'s long.	
1	12 0 15	25 50	4 s 22	5 43	1 12	1 51	1 07	1 20	
2	13 1 7	9 7	3 28	5 4	3 5	12 36	2 22	17 6	
3	14 1 59	24 23	2 20	5 3	2 58	13 21	3 37	18 53	
4	15 2 49	9 X 30	1 2	5 35	2 51	14 6	4 52	20 41	
5	16 3 37	24 17	0 n 18	5 28	2 44	14 51	6	22 20	
6	17 4 24	8 22	1 35	5 24	2 36	25 36	7 23	24 17	
C	18 5 10	22 35	2 44	5 19	2 29	16 22	8 38	26 6	
8	19 5 54	6 8	3 42	5 15	2 21	17 7	9 53	27 55	
9	20 6 36	19 7	4 26	5 10	2 14	17 52	11 8	29 44	
10	21 7 16	1 14	4 56	5 5	2 6	18 37	12 23	1 X 32	
11	22 7 55	14 14	5 11	5 1	1 59	19 22	13 39	3 20	
12	23 8 32	26 25	5 12	4 56	1 51	20 7	14 54	5 7	
13	24 9 7	8 26	4 49	4 51	1 43	20 53	16 9	6 54	
C	25 9 40	20 21	4 33	4 47	1 36	21 38	17 24	8 40	
15	26 10 11	2 2	3 56	4 42	1 28	22 24	18 39	10 24	
16	27 10 41	14 2	3 8	4 37	1 20	23 9	19 54	12 5	
17	28 11 9	25 52	2 12	4 32	1 12	23 55	21 9	13 44	
18	29 11 35	7 45	1 10	4 27	1 4	24 40	22 24	15 20	
19	X 0 12 0	19 42	0 5	4 22	0 56	25 26	23 39	16 53	
20	1 12 23	1 46	1 s 1	4 18	0 49	26 11	24 54	18 22	
C	2 12 45	13 59	2 6	4 13	0 41	26 57	26 9	20 45	
22	3 13 5	16 23	3 5	4 8	0 33	27 42	27 24	21 2	
23	4 13 24	9 2	3 57	4 3	0 25	28 28	28 39	22 13	
24	5 13 42	21 59	4 38	3 58	0 17	29 13	29 54	23 18	
25	6 13 58	5 17	5 6	3 53	0 9	29 56	1 X	21 16	
26	7 14 12	18 58	5 17	3 49	0 2	0 44	2 24	25 6	
27	8 14 26	3 2	5 10	3 44	29 54	1 30	3 39	25 47	
C	9 14 38	17 29	4 43	3 39	29 46	2 16	4 54	26 20	
Days	u's rites	♂'s rites	♀'s rites	♂'s rites	h's declin.	u's declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	6 s 19	6 s 3	7 m 12	4 s 42	11 n 7	11 n 29	23 s 37	20 s 41	18 s 11
7	5 51	5 56	7 2	5 25	11 18	11 46	23 12	19 2	14 23
13	5 23	5 48	6 57	6 3	11 29	12 3	22 39	17 5	9 50
19	4 55	5 40	6 5	6 40	11 40	12 20	21 56	14 50	4 58
25	4 28	5 30	6 45	7 4	11 51	12 38	21 5	12 20	0 45

The LUNATIONS.

New Moon the 4th day, at 55 minutes past 4 morning.
 First quarter the 11th day, at 24 minutes past 6 morning.
 Full Moon the 19th day, at 15 minutes past 11 morning.
 Last quarter the 26th day, at 7 minutes past 11 night.

M. Sun. days & other D. remark. days	☉ rises	☉ sets	☉'s declin.	☾'s decl. n.	Drises & sets	☾ South	Clock bef. ☉
1 David [Cath]	6 34	5 21	7 44	23 33	5 44	9m 29	12 45
2 Shrove Tuesday	6 32	5 28	7 21	18 21	6 30	10 28	12 33
3 Ash Wednesday	6 3	5 31	6 58	12 12	6 26	11 24	12 21
4	6 21	5 32	6 35	5 1	Drises	12 16	12 8
5	6 2	5 34	6 12	1 55	7 27	1 7	11 54
6	6 4	5 36	5 49	8 4	9 4	1 56	11 41
7 1st Sun. in Lent	6 21	5 38	5 26	14 5	10 32	2 46	11 26
8 [Purific]	6 20	5 40	5 2	20 16	11 58	3 37	11 12
9	6 1	5 42	4 3	24 24	morn	4 29	10 56
10 Ember Week	6 16	5 44	4 16	27 13	1 1	5 23	10 41
11	6 1	5 46	3 52	28 34	2 20	6 17	10 25
12 Gregory	6 12	5 48	3 29	28 30	3 28	7 10	10 9
13	6 1	5 50	3 5	27 5	4 11	8 1	9 52
14 2nd Sun. in Lent	6 8	5 52	2 41	24 28	4 41	8 49	9 35
15	6 6	5 54	2 18	20 55	5 4	9 35	9 18
16	6 4	5 56	1 54	16 22	5 2	10 18	9 1
17 St. Patrick	6 2	5 58	1 30	11 16	5 34	10 59	8 43
18 Edward K.W.S.	6 0	6 0	1 7	5 43	5 46	11 40	8 25
19	5 58	6 2	0 43	0 5	Drises	morn	8 7
20	5 56	6 4	0 19	5 59	7 28	0 21	7 49
21 3rd Sun. in Lent	5 54	6 6	0 n 4	11 43	8 51	1 2	7 31
22 [Benedict]	5 52	6 8	0 28	17 5	10 11	1 46	7 12
23	5 5	6 10	0 52	21 47	11 35	2 34	6 54
24	5 48	6 12	1 15	25 30	morn	3 26	6 35
25 Anna. Lady Day	5 41	6 14	1 30	27 54	0 58	4 22	6 17
26	5 4	6 16	2 2	28 41	2 8	5 21	5 58
27	5 4	6 18	2 26	27 40	3 8	6 23	5 40
28 4th or Midl. Sund.	5 40	6 20	2 40	24 52	3 50	7 24	5 21
29	5 36	6 21	3 13	20 29	4 17	8 22	5 2
30	5 37	6 23	3 36	14 49	4 37	9 18	4 44
31	5 26	6 25	3 59	8 1	4 53	10 10	4 25
☉ Day Length incref. of day	Helio. long. ♀	Helio. long. ♀	Helio. long. ♂	Helio. long. ☉	Helio. long. ♀	Helio. long. ♂	h sets
1 3 10 10 52	4m 17	1m 35	8m 16	10m 15	0m 3	24m 41	6m 45
7 3 32 11 10	4 30	2 3 11	50 16	15 10	3 27	15 15	6 22
13 3 50 11 4	4 42	2 30 15	25 22	14 9	3 24	15 5	5 50
19 4 29 12 2	4 55	2 58 19	2 29	11 29	16 24	4 5	5 36
25 4 44 12 28	5 8	3 26 22	41 4	0 8	10 8	5 14	

Day	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	4 45	7 17	1 5	11 26	1 n 53	1 n 17	0 5 58	1 s 24	2 n 36
7	4 30	7 30	1 5	21 7	1 54	1 17	1 2	1 26	3 32
13	4 17	7 45	1 55	20 45	1 54	1 17	1 5	1 2	3 26
19	4 4	7 56	1 54	0 20	1 54	1 16	1 5	1 23	2 19
25	3 50	8 10	2 5	0 10	1 53	1 16	1 13	1 18	0 48
Days	☉'s longitude	☽'s long	☽'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.	
1	10 14 48	16 16	3 5	31 234	29 38	3 2	6 9	26 43	
2	11 14 56	17 17	2 55	3 29	29 31	2 47	7 24	27 3	
3	12 15 3	2 21	1 45	3 24	29 25	4 33	8 39	27 8	
4	13 15 8	17 23	0 18	3 20	29 18	5 19	9 54	26 58	
5	14 15 11	2 12	1 n 4	3 15	29 12	6 5	11 0	26 43	
6	15 15 17	16 41	2 20	3 10	29 5	6 51	12 23	26 21	
C	16 15 10	0 47	3 25	3 6	28 53	7 37	13 58	25 53	
8	17 15 7	14 25	4 17	3 1	28 46	8 22	14 53	25 18	
9	18 15 1	27 37	5 53	2 57	28 39	9 8	16 8	24 35	
10	19 14 53	10 26	5 13	2 52	28 32	9 5	17 22	23 44	
11	20 14 43	22 53	5 18	2 48	28 26	10 4	18 37	22 50	
12	21 14 31	5 5	5 8	2 43	28 19	11 26	19 52	21 55	
13	22 14 16	17 4	4 45	2 39	28 12	12 12	21 7	20 59	
C	23 13 59	28 56	4 10	2 35	28 6	12 58	22 22	20 2	
15	24 13 40	10 45	3 24	2 30	27 59	13 44	23 37	19 6	
16	25 13 18	22 34	2 30	2 26	27 53	14 30	24 51	18 11	
17	26 12 54	4 12	1 29	2 22	27 46	15 16	26 6	17 19	
18	27 12 28	16 26	0 23	2 17	27 40	16 2	27 21	16 32	
19	28 11 59	28 33	0 54	2 13	27 34	16 48	28 35	15 51	
20	29 11 29	10 50	1 50	2 9	27 28	17 34	29 50	15 15	
C	0 10 57	23 19	2 52	2 5	27 23	18 20	1 4	14 43	
22	1 10 23	6 0	3 46	2 1	27 17	19 6	2 10	14 16	
23	2 9 48	18 55	4 30	1 57	27 12	19 52	3 33	13 55	
24	3 9 10	2 5	5 0	1 53	27 6	20 38	4 48	13 41	
25	4 8 31	15 29	5 15	1 50	27 1	21 25	6 2	13 34	
26	5 7 50	29 10	5 13	1 46	26 56	22 11	7 17	13 30	
27	6 7 7	13 6	4 53	1 43	26 52	22 57	8 31	13 30	
C	7 6 23	27 18	4 14	1 39	26 47	23 42	9 46	13 34	
29	8 5 37	11 42	3 19	1 36	26 43	24 29	11 0	13 4	
30	9 4 47	26 17	2 10	1 32	26 38	25 15	12 15	14 10	
31	10 3 59	10 58	0 53	1 29	26 34	26 1	13 29	14 22	
Days	u's fets	δ's rises	♀'s rises	♂'s fets	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	6 m 34	5 m 24	6 m 20	7 a 6	11 n 58	12 n 49	20 8 2	10 5 34	1 n 5
7	6 9	5 14	6 28	rises	12 9	13 4	19 25	7 46	1 3
13	5 45	5 3	6 19	5 m 48	12 10	13 19	18 12	4 50	0 5 25
19	5 22	4 52	6 0	5 25	12 28	13 32	16 55	1 50	3 27
25	5 1	4 40	5 58	5 7	12 36	13 43	15 31	1 n 12	5 44

THE LUNATIONS.

New Moon the 2d day, at 15 minutes past 3 afternoon.

First quarter the 6th day, at 25 minutes past 12 night.

Full Moon the 18th day, at 35 minutes past 2 morning.

Last quarter the 25th day, at 45 minutes past 5 morning.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾ rises & sets	☾ South	Clock bef. ☉	
1		5 33	6 27	4 n 23	1 s 18	5 m 8	11 m 1	4' 7"	
2		5 31	6 29	4 46	5 n 4	☉ sets	11 50	3 49	
3	Richard	5 29	6 31	5 5	12 16	8 a 8	10 a 40	3 31	
4	☉ Supd. in Legt Ambrose	5 27	6 33	5 32	18 6	9 35	1 31	3 13	
5		5 24	6 35	5 55	22 49	11 0	2 24	2 55	
6	Old Lady Day	5 23	6 3	6 17	25 14	morn	3 19	2 37	
7		5 21	6 39	6 40	23 11	0 19	4 14	2 20	
8		5 19	6 41	7 3	23 37	1 24	5 9	2 2	
9	Cam. T. ends	5 17	6 43	7 23	27 37	2 15	6 2	1 45	
10	Oxt. T. ends	5 15	6 45	7 47	25 21	2 52	6 52	1 28	
11	☉ Palm Sunday	5 13	6 47	8 6	22 6	3 17	7 39	1 12	
12		5 11	6 49	8 32	17 47	3 36	8 22	0 55	
13		5 9	6 51	8 53	12 52	3 50	9 4	0 39	
14		5 7	6 53	9 15	7 28	4 1	9 45	0 24	
15	Maundy Thurf.	5 5	6 55	9 37	1 43	4 12	10 25	0 8	
16	Good Friday	5 4	6 56	9 58	4 10	4 22	11 7	0 a 7	
17		5 2	6 58	10 19	10 1	4 33	11 51	0 22	
18	☉ Easter Day	5 0	7 0	10 40	15 35	☉ rises	morn	0 36	
19	Easter Monday	Aphr.	7 2	11 1	20 33	9 a 25	0 38	0 50	
20	Easter Tuesday	4 56	7 4	11 22	24 37	10 50	1 29	1 4	
21		4 54	7 6	11 43	27 22	morn	2 24	1 17	
22		4 52	7 8	12 3	28 32	0 9	3 23	1 30	
23	St. George	4 50	7 10	12 23	27 56	1 12	4 24	1 42	
24	[Prs. Mary b.	4 48	7 11	12 43	25 34	1 57	5 25	1 54	
25	☉ Low S. St. Mar.	4 47	7 13	13 3	21 37	2 28	6 23	2 5	
26		4 45	7 15	13 22	16 25	2 50	7 18	2 16	
27		4 43	7 17	13 42	10 17	3 7	8 10	2 26	
28	Ox. & Ca. T. b.	4 41	7 19	14 1	3 38	3 21	8 50	2 36	
29		4 40	7 20	14 20	3 10	3 33	9 47	2 45	
30		4 38	7 22	14 38	9 n 47	3 45	10 36	2 54	
Days	Day increas.	Length of day	Helioc. long. ♀	Helioc. long. ☿	Helioc. long. ♂	Helioc. long. ☊	Helioc. long. ♀	Helioc. long. ♂	h sets
1	5 10	12 54	5 22	30 25	20 58	11 31	19 48	26 11	4 m 48
7	5 34	13 10	5 35	4 26	0 46	16 57	27 23	13 7	4 23
13	5 58	13 47	5 48	4 54	4 24	22 50	8 59	29 41	3 57
19	6 20	14 4	6 1	5 22	8 8	28 41	18 3	17 1	3 31
25	6 42	14 26	6 15	5 45	11 54	4 m 32	28 13	5 5	3 5

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	3 32	8 28	2 0	19 47	1 53	1 15	1 15	1 10	0 47
7	3 1	8 44	2 4	19 28	1 53	1 15	1 18	1 1	1 47
13	3 0	9 0	2 5	19 9	1 52	1 14	1 20	0 50	2 25
19	2 43	9 17	2 14	18 50	1 51	1 13	1 22	0 38	2 42
25	2 26	0 34	2 20	18 31	1 51	1 12	1 24	0 25	2 39
Days	☉'s longitude	☽'s long.	☽'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.	
1	11 3 8	25 39	0 n 28	1 26	26 30	26 48	14 44	15 10	
2	12 2 14	10 13	1 46	1 23	26 27	27 34	15 58	15 44	
3	13 1 19	24 33	2 57	1 20	26 23	28 20	17 13	16 21	
C	14 0 21	8 36	3 55	1 17	26 20	29 6	18 27	17 1	
5	14 59 22	22 16	4 37	1 14	26 16	29 52	19 41	17 44	
6	15 58 20	5 32	5 4	1 11	26 13	0 38	20 56	18 32	
7	16 57 15	18 25	5 14	1 9	26 10	1 25	22 10	19 25	
8	17 56 9	0 57	5 9	1 6	26 8	2 11	23 24	20 20	
9	18 55 0	13 11	4 50	1 4	26 5	2 57	24 39	21 18	
10	19 53 49	25 12	4 18	1 1	26 3	3 43	25 53	22 18	
C	20 52 35	7 5	3 35	0 59	26 0	4 29	27 7	23 21	
12	21 51 19	18 53	2 44	0 57	25 58	5 15	28 21	24 27	
13	22 50 1	0 44	1 46	0 55	25 56	6 2	29 35	25 35	
14	23 48 40	12 39	0 42	0 53	25 54	6 48	0 50	26 46	
15	24 47 18	24 4	0 24	0 51	25 53	7 34	2 4	27 59	
16	25 45 53	7 3	1 30	0 50	25 52	8 20	3 18	29 13	
17	26 44 26	19 35	2 33	0 48	25 51	9 6	4 32	0 30	
C	27 42 58	2 23	3 29	0 46	25 50	9 52	5 46	1 49	
19	28 41 27	15 26	4 15	0 45	25 49	10 38	7 0	3 11	
20	29 39 55	28 45	4 49	0 43	25 49	11 24	8 14	4 35	
21	0 38 21	12 16	5 7	0 42	25 49	12 10	9 28	6 0	
22	1 36 45	25 59	5 8	0 41	25 49	12 56	10 42	7 27	
23	2 35 8	9 51	4 51	0 40	25 49	13 42	11 56	8 56	
24	3 33 30	23 52	4 17	0 39	25 49	14 28	13 10	10 27	
C	4 31 50	7 58	3 27	0 38	25 49	15 15	14 24	12 0	
26	5 30 9	22 9	2 24	0 38	25 50	16 1	15 38	13 35	
27	6 28 26	6 23	1 12	0 38	25 51	16 47	16 52	15 12	
28	7 26 41	20 38	0 n 5	0 38	25 52	17 33	18 6	16 50	
29	8 24 56	4 52	1 21	0 38	25 53	18 19	19 20	18 30	
30	9 23 8	19 1	2 31	0 38	25 54	19 5	20 34	20 12	
Days	u's fets	δ's fets	♀'s fets	♂'s fets	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	4 m 35	4 m 26	6 a 42	4 m 56	12 n 44	13 n 52	13 s 46	4 n 44	6 s 34
7	4 13	4 14	7 4	4 47	12 50	13 50	12 12	7 42	5 50
13	3 5	4 1	7 25	4 40	12 54	14 3	10 3	10 33	3 59
19	3 28	3 47	7 46	4 32	12 58	14 4	8 51	13 16	1 13
25	3 5	3 32	8 6	4 24	12 50	14 4	7 7	15 47	2 n 18

The LUNATIONS.

New Moon the 2d day, at 43 minutes past 1 morning.
 First quarter the 6th day, at 57 minutes past 6 afternoon.
 Full Moon the 17th day, at 37 minutes past 2 afternoon.
 Last quarter the 24th day, at 59 minutes past 10 morning.
 New Moon the 31st day, at 43 minutes past 12 noon.

M. Sun. & other D. r. mark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock aft. ☉	
1 St. Phil. & Jam.	4 30	7 24	14 57	15 05	3 m 5	11 m 25	3 1	
2 Su. aft. Easter	4 31	7 25	15 15	15 21	☽ sets	ca 1	3 1	
3 Inv. of Cross	4 33	7 27	15 33	15 24	9 a 56	1 11	3 17	
4	4 31	7 29	15 50	15 27	11 14	2 7	3 23	
5 East. Term b.	4 29	7 31	16 8	15 28	morn	3 3	3 2	
6 John Ev. A. P. L.	4 27	7 33	16 25	15 27	0 11	3 57	3 35	
7	4 26	7 34	16 42	15 26	0 55	4 49	3 40	
8	4 24	7 36	16 58	15 23	1 24	5 37	3 44	
9 3 Su. aft. Easter	4 23	7 37	17 14	15 19	1 44	6 22	3 48	
10	4 21	7 39	17 30	15 14	2 0	7 4	3 51	
11	4 19	7 41	17 46	15 9	2 13	7 45	3 51	
12	4 18	7 42	18 1	15 3	2 24	8 25	3 56	
13 Old May Day	4 16	7 44	18 17	15 2	2 34	9 5	3 58	
14	4 15	7 45	18 31	15 8	2 43	9 48	3 59	
15	4 13	7 47	18 46	15 13	2 55	10 33	3 59	
16 4 S. af. Easter	4 12	7 48	19 0	15 18	3 9	11 23	3 50	
17 Pres. Wales b.	4 10	7 50	19 14	15 23	☽ rises	morn	3 58	
18	4 9	7 51	19 27	15 26	9 a 54	0 17	3 57	
19 Queen Char. b.	4 8	7 52	19 41	15 28	11 3	1 16	3 55	
20 [Dunstan]	4 6	7 54	19 53	15 28	11 57	2 18	3 53	
21	4 5	7 55	20 6	15 26	morn	3 20	3 50	
22 Pres. Elis. born	4 4	7 56	20 18	15 22	0 32	4 20	3 46	
23 5 or Rog. Sun.	4 2	7 58	20 30	15 17	0 57	5 16	3 42	
24	4 1	7 59	20 41	15 11	1 14	6 8	3 39	
25	4 0	8 0	20 53	15 5	1 29	6 57	3 33	
26 Augustin, Abp.	3 59	8 1	21 3	15 33	1 40	7 44	3 27	
27 Ascen. Holy Th.	3 58	8 2	21 14	15 8	1 53	8 31	3 21	
28 [Ven. Bede]	3 57	8 3	21 24	15 9	2 7	9 19	3 14	
29 K. Char. 2 rest.	3 55	8 5	21 33	15 19	2 21	10 8	3 7	
30 Sun. af. Ascen.	3 54	8 6	21 43	15 23	2 41	11 0	2 59	
31 Easter Term c.	3 53	8 7	21 52	15 26	☽ sets	11 55	2 51	
Days	Day increas	Length of day	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ☽	Helioc. long. ☽	☽ sets
1	7 4 14 48	60 26	6 21	17 15	40 10	1 21	7 11	52 17
7	7 24 15 8	6 39	6 45	19 28	16 10	17 32	12 57	2 31
13	7 44 15 28	6 51	7 12	23 16	21 5	27 13	23 26	2 8
19	8 0 15 44	7 4	7 40	27 4	27 44	6 25	56 28	8 56
25	8 10 16 0	7 17	8 8	31 20	16 39	6 28	10 1	1 22

M	Day lig. begins	Daylig. ends	Durat. twilig.	Pl. (°'s) none	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	2 7	9 55	2 31	18X12	1 n 50	1 n 11	1 s 26	0 s 11	2 s 17
7	1 45	10 18	2 43	17 53	1 49	1 10	1 27	0 n 4	1 36
13	1 20	10 45	3 1	17 34	1 40	1 9	1 28	0 19	0 41
19	0 48	11 20	3 27	17 15	1 48	1 0	1 29	0 34	0 n 22
25	All day light.			16 56	1 47	1 8	1 29	0 48	1 19
M	☉'s longitude		☌'s long.	☌'s latitude	h's longit.	u's longit.	δ's longit.	♀'s longit.	♂'s long.
1	8 10	21 19	3 8	3 n 32	0 m 35	2 s 55	19X50	21 8 47	21 9 56
C	11 19	29	10 47	4 18	0 37	25 57	20 36	23 1	23 41
3	12 17	37	0 II 16	4 50	0 D 37	25 59	21 22	24 15	25 29
4	13 15	43	13 27	5 5	0 37	26 1	22 8	25 20	27 19
5	14 13	47	26 17	5 4	0 37	26 3	22 5	26 47	9 10
6	15 11	49	8 49	4 48	0 36	26 5	23 40	27 57	18 3
7	16 9	50	21 3	4 19	0 36	26 8	24 25	29 10	2 58
8	17 7	48	3 4	3 40	0 36	26 11	25 11	0 II 24	4 54
C	18 5	45	14 57	2 51	0 37	26 14	25 57	1 37	6 53
10	19 3	40	26 46	1 55	0 38	26 17	26 42	2 51	8 54
11	20 1	33	8 m 37	0 54	0 39	26 20	27 28	4 4	10 56
12	20 59	24	20 35	0 s 10	0 40	26 23	28 14	5 18	13 0
13	21 57	13	2 45	1 14	0 41	26 27	28 59	6 31	15 5
14	22 55	1	15 11	2 16	0 42	26 31	29 45	7 45	17 11
15	23 52	47	27 56	3 13	0 43	26 35	30 30	8 58	19 19
C	24 50	32	11 n 1	4 1	0 45	26 40	1 16	10 12	21 28
17	25 48	15	24 26	4 37	0 46	26 44	2 1	11 25	23 38
18	26 45	56	8 9	4 58	0 47	26 48	2 47	12 39	25 49
19	27 43	37	22 7	5 2	0 49	26 53	3 32	13 52	28 1
20	28 41	17	5 16	4 47	0 51	26 58	4 18	15 6	0 II 13
21	29 38	55	20 29	4 15	0 53	27 3	5 3	16 19	2 24
22	II 0	36 33	4 44	3 27	0 55	27 8	5 48	17 33	4 35
C	1 34	9	18 58	2 26	0 57	27 13	6 33	18 46	6 46
24	2 31	45	3X7	1 16	0 59	27 18	7 18	20 0	8 56
25	3 29	20	17 11	0 2	1 1	27 23	8 3	21 13	11 5
26	4 26	54	1 9	1 n 12	1 4	27 29	8 48	22 26	23 12
27	5 24	28	15 0	2 20	1 6	27 35	9 33	23 40	15 18
28	6 22	1	28 44	3 20	1 9	27 41	10 18	24 53	17 22
2	7 19	32	12 8 19	4 7	1 12	27 47	11 3	26 6	19 24
C	8 17	3	25 42	4 40	1 14	27 53	11 48	27 20	21 24
31	9 14	33	8 II 53	4 5	1 17	27 59	12 33	28 32	23 22
M	u's sets	δ's rises	♀'s sets	♂'s rises	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	2 m 43	3 m 17	8 27	4 m 16	13 n 0	14 n 1	5 s 21	18 n 4	6 n 26
7	2 20	3 2	8 47	4 10	12 59	14 55	3 35	20 4	11 1
13	1 57	2 46	9 5	4 6	12 56	13 48	1 45	21 44	15 44
19	1 34	2 30	9 22	4 2	12 53	13 39	0 n 3	23 3	20 6
25	1 11	2 13	9 37	4 9	12 48	13 27	1 50	23 58	23 26

The LUNATIONS.

First quarter the 8th day, at 48 minutes past 12 noon.
 Full Moon the 15th day, at 50 minutes past 11 night.
 Last quarter the 22d day, at 1 minute past 4 afternoon.
 New Moon the 30th day, at 2 minutes before 1 morning.

M	Sundays & other remark. days.	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock aft. ☉	
1	Nicomede	3 52	8 8	22 n 0	28 n 12	9 a 59	0 a 50	2' 43"	
2	[T. d. m.]	3 52	8 8	22 8	28 10	10 48	1 46	2 34	
3	Oxf. T.e. Cam.	3 51	8 9	22 16	26 41	11 22	2 38	2 24	
4	K. Geo. 3 born	3 50	8 10	22 24	23 59	11 45	3 28	2 15	
5	Duke of Cum.b Bonifa.	8	11	22 31	20 16	morn	4 14	2 4	
6	Whit Sunday	3 48	8 12	22 37	15 47	0 3	4 57	1 54	
7	Whit Monday	3 48	8 12	22 43	10 44	0 16	5 38	1 43	
8	Whit Tuesday	3 47	8 13	22 49	5 17	0 28	6 17	1 32	
9	Ember Week	3 46	8 14	22 55	0 s 25	0 38	6 57	1 21	
10		3 46	8 14	23 0	6 11	0 48	7 38	1 10	
11	St. Barnabas	3 45	8 15	23 4	11 51	0 58	8 21	0 58	
12		3 45	8 15	23 8	17 11	1 10	9 8	0 46	
13	Trinity Sunday	3 44	8 16	23 12	21 54	1 26	10 0	0 34	
14		3 44	8 16	23 16	25 35	1 47	10 58	0 22	
15		3 44	8 16	23 19	27 49	☽ rises	morn	0 10	
16	Oxf. T. begins	3 44	8 16	23 21	28 17	9 a 46	0 0	0 b. 3	
17	Alban: Cor.Ch.	3 43	8 17	23 23	26 48	10 29	1 3	0 16	
18	Trin. T. begins	3 43	8 17	23 25	23 29	10 57	2 6	0 29	
19		3 43	8 17	23 26	18 41	11 15	3 5	0 41	
20	2 Sun. af. Trin. Tr. Ed.	8	17	23 27	12 50	11 32	3 59	0 54	
21	Longest Day	3 43	8 17	23 28	6 22	11 44	4 50	1 7	
22		3 43	8 17	23 28	0 n 19	11 56	5 38	1 20	
23		3 43	8 17	23 28	6 52	morn	6 25	1 33	
24	Nati.St.J.Bapt.	3 43	8 17	23 27	12 59	0 8	7 11	1 46	
25		3 43	8 17	23 26	18 25	0 22	8 0	1 59	
26		3 44	8 16	23 24	22 52	0 40	8 50	2 12	
27	2 Sun. af. Trin.	3 44	8 16	23 22	26 6	1 5	9 43	2 24	
28		3 44	8 16	23 20	27 56	1 38	10 37	2 37	
29	St. Peter	3 45	8 15	23 17	28 18	2 24	11 32	2 49	
30		3 45	8 15	23 14	27 12	☽ sets	0 a 26	3 1	
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	h
D	increaf.	of day	long. ♀	long. ♀	long. ♂	long. ☉	long. ♀	long. ♂	sets
1	8 32	16 16	7m 31	8m 40	5 19	10 f 12	28 1	17 8	0 m 54
7	8 40	16 24	7 44	9 8	9 8	15 57	7 46	15 55	0 29
13	8 48	16 32	7 57	9 35	12 56	21 40	17 32	9 44	0 4
19	8 50	16 34	8 9	10 3	16 43	27 24	27 17	om 1	11 a 39
25	8 50	16 34	8 22	10 31	20 30	3 7	7m 3	18 5	11 14

Days	Day lig. begins	Day lig. ends	Durat. twilig.	Pl. D's node	h's latitude	☿'s latitude	♂'s latitude	♀'s latitude	♂'s latitude
1	5 30	6 29	1 55	22 X 55	1 n 50	1 n 14	0 s 41	0 s 46	2 s 1
7	5 22	6 38	1 54	22 36	1 51	1 15	0 45	0 58	1 39
13	5 12	6 48	1 53	22 17	1 52	1 15	0 48	1 7	0 55
19	5 1	6 59	1 52	21 58	1 53	1 10	0 52	1 15	0 n 14
25	4 50	7 10	1 52	21 38	1 51	1 16	0 50	1 21	1 40
Days	☉'s longitude	☽'s long.	☿'s latitude	h's long.	☿'s long.	♂'s long.	♀'s long.	♂'s long.	
1	12 0 15	25 50	4 s 22	5 n 45	12 11	51 11	7 11	20 11	
2	13 1 7	9 7	3 23	5 4	3 5	12 36	2 22	17 6	
3	14 1 59	24 23	2 20	5 33	2 55	13 21	3 37	18 53	
4	15 2 49	9 X 30	1 2	5 33	2 51	14 6	4 52	20 41	
5	16 3 37	24 17	0 n 18	5 28	2 44	14 51	6 2	22 20	
6	17 4 24	8 22	1 35	5 24	2 30	25 30	7 23	24 17	
C	18 5 10	22 35	2 44	5 19	2 29	16 22	8 38	26 6	
8	19 5 54	6 8	3 42	5 15	2 21	17 7	9 53	27 55	
9	20 6 36	19 7	4 26	5 10	2 14	17 52	11 8	29 44	
10	21 7 16	1 II 49	4 56	5 5	2 6	18 37	12 23	1 X 32	
11	22 7 55	14 14	5 11	5 1	1 59	19 22	13 39	3 20	
12	23 8 32	26 25	5 12	4 56	1 51	20 7	14 54	5 7	
13	24 9 7	8 26	4 49	4 51	1 43	20 53	16 9	6 54	
C	25 9 40	20 21	4 33	4 47	1 36	21 38	17 24	8 40	
15	26 10 11	2 2	3 56	4 42	1 28	22 24	18 39	10 24	
16	27 10 41	14 2	3 8	4 37	1 20	23 9	19 54	12 5	
17	28 11 9	25 52	2 12	4 32	1 12	23 55	21 1	13 44	
18	29 11 35	7 45	1 10	4 27	1 4	24 40	22 24	15 20	
19	X 0 12 0	19 42	0 5	4 22	0 56	25 26	23 39	16 53	
20	1 12 23	1 46	1 s 1	4 18	0 49	26 11	24 54	18 22	
C	2 12 45	13 59	2 6	4 13	0 41	26 57	26 9	20 45	
22	3 13 5	26 23	3 5	4 8	0 33	27 43	27 24	21 2	
23	4 13 24	9 m 2	3 57	4 3	0 25	28 28	28 30	22 13	
24	5 13 42	21 59	4 38	3 58	0 17	29 13	29 54	23 18	
25	6 13 58	5 17	5 6	3 53	0 9	29 50	1 X	21 16	
26	7 14 12	18 58	5 17	3 47	0 2	0 44	2 24	25 6	
27	8 14 26	3 2	5 10	3 44	0 54	1 30	3 39	25 47	
C	9 14 38	17 29	4 43	3 39	29 46	2 16	4 54	26 20	
Days	☿'s rises	♂'s rises	♀'s rises	♂'s sets	h's declin.	☿'s declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	6 17	6 4	7 m 12	4 42	11 n 7	11 29	23 s 37	20 s 41	18 s 11
7	5 51	5 56	7 2	5 23	11 18	11 46	23 12	19 2	14 23
13	5 23	5 48	6 57	6 3	11 29	12 3	22 39	17 5	9 50
19	4 55	5 40	6 5	6 40	11 40	12 20	21 56	14 50	4 58
25	4 28	5 30	6 45	7 4	11 51	12 38	21 5	12 20	0 45

The LUNATIONS.

First quarter the 8th day, at 57 minutes past 4 morning.

Full Moon the 15th day, at 28 minutes past 7 morning.

Last quarter the 21st day, at 22 minutes past 10 night.

New Moon the 29th day, at 4 minutes past 3 afternoon.

M	Sundays & other D remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾ rises & sets	☾ South	Clock bef. ☉	
1		3 46	8 14	23 n 10	24 n 48	9 a 43	1 a 16	3' 13"	
2	Vifita. of V. M.	3 46	8 14	23 6	21 20	10 3	2 4	3 25	
3	Dog days begin	3 47	8 13	23 2	17 2	10 18	2 48	3 37	
		3 47	8 13	22 57	12 6	10 29	3 29	3 48	
9	[Tr. St. Mar.]	3 48	8 12	22 52	6 46	10 39	4 8	3 59	
6	Cam. C. O. Midf.	3 49	8 11	22 46	1 10	10 48	4 47	4 9	
7	Trin. Ter. ends	3 49	8 11	22 40	4 s 31	10 58	5 27	4 19	
8	[Tho. à Becket]	3 50	8 10	22 34	10 8	11 9	6 8	4 29	
9	Camb. T. ends	3 51	8 9	22 27	15 31	11 24	6 53	4 38	
10		3 52	8 8	22 20	20 22	11 43	7 42	4 47	
		3 53	8 7	22 12	24 24	morn	8 36	4 56	
12	[Oxford Act Trin.]	3 54	8 6	22 4	27 12	0 10	9 35	5 4	
13		3 55	8 5	21 56	28 23	0 52	10 39	5 11	
14		3 56	8 4	21 47	27 38	1 53	11 43	5 18	
15	Swithin	3 57	8 3	21 38	24 56	Drises	morn	5 25	
16		3 58	8 2	21 29	20 27	9 a 14	0 45	5 31	
17	Oxford Ter. e.	3 59	8 1	21 19	14 45	9 32	1 43	5 37	
		4 0	8 0	21 9	8 13	9 46	2 38	5 42	
19	[St. Ann. alt. Trin.]	4 1	7 59	20 58	1 20	9 59	3 28	5 47	
20	Margaret	4 3	7 57	20 47	5 n 27	10 10	4 17	5 51	
21		4 4	7 56	20 36	11 49	10 25	5 4	5 54	
22	Magdalen	4 5	7 55	20 25	17 28	10 41	5 53	5 58	
23		4 7	7 53	20 13	22 8	11 4	6 43	6 0	
24	[St. James]	4 8	7 52	20 0	25 38	11 34	7 35	6 2	
		4 9	7 51	19 48	27 45	morn	8 29	6 4	
26	St. Anne	4 11	7 49	19 35	28 26	0 15	9 23	6 4	
27		4 12	7 48	19 22	27 39	1 11	10 17	6 5	
28		4 14	7 46	19 8	25 34	2 17	11 9	6 4	
29		4 15	7 45	18 54	22 20	☾ sets	11 57	6 4	
30		4 17	7 43	18 40	18 12	8 a 22	0 a 43	6 2	
31		4 18	7 42	18 25	13 24	8 34	1 25	6 0	
M	Day D decreaf.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♀	☾ sets
1	0 6	16 28	8 m 34	10 m 58	24 17	8 51	16 m 47	4 f 57	10 a 50
7	0 12	16 22	8 47	10 26	28 2	14 34	26 31	21 27	10 26
13	0 24	16 10	9 0	11 53	19 46	20 17	6 m 14	8 59	10 3
19	0 36	15 58	9 12	12 21	5 29	26 1	15 56	26 21	9 40
25	0 52	15 42	9 25	12 48	9 10	1 m 44	25 36	16 m 28	9 17

M	Daylig.	Daylig.	Durat.	Pl. D's	h's	u's	δ's	♀'s	♂'s
D	begins	ends	twilig.	node	latitude	latitude	latitude	latitude	latitude
1				14 58	1 n 43	1 n 3	1 s 23	1 n 41	1 s 33
7	All	day	light	14 39	1 43	1 3	1 21	1 41	3 4
13				14 20	1 42	1 2	1 18	1 39	4 21
19				14 1	1 42	1 2	1 15	1 33	4 56
25	0 45	11 10	3 20	13 42	1 42	1 2	1 11	1 25	4 32
M	☉'s	☌'s	☍'s	h's	u's	δ's	♀'s	♂'s	
D	longitude	long.	latitude	long.	long.	long.	long.	long.	
1	8 50 40	25 21	3 n 47	3 m 28	2 m 17	58 14	6 12	1 10	
2	9 47 54	7 24	3 0	3 33	2 27	5 57	7 25	1 30	
3	10 45 7	19 18	2 5	3 39	2 37	6 39	8 37	1 43	
C	11 42 21	1 m 7	1 5	3 44	2 48	7 22	9 49	1 49	
5	12 39 34	12 54	0 2	3 50	2 58	8 4	11 2	1 51	
6	13 36 47	24 43	1 s 1	3 55	3 8	8 47	12 14	1 50	
7	14 33 59	6 40	2 2	4 1	3 19	9 29	13 26	1 45	
8	15 31 12	18 50	2 59	4 7	3 30	10 11	14 38	1 30	
9	16 28 24	1 m 18	3 49	4 3	3 40	10 53	15 51	1 22	
10	17 25 36	14 9	4 28	4 9	3 51	11 35	17 3	1 2	
11	18 22 48	27 27	4 55	4 5	4 1	12 17	18 15	0 38	
12	19 20 1	11 11	5 7	4 1	4 12	12 59	19 27	0 10	
13	20 17 13	25 23	5 0	4 37	4 23	13 41	20 39	29 39	
14	21 14 25	9 58	4 33	4 43	4 34	14 22	21 51	29 5	
15	22 11 38	24 50	3 49	4 49	4 45	15 4	23 3	28 28	
16	23 8 52	9 49	2 47	4 56	4 56	15 45	24 15	27 48	
17	24 6 6	24 48	1 35	5 2	5 7	16 27	25 27	27 7	
C	25 3 20	9 38	0 16	5 8	5 18	17 8	26 39	26 26	
19	26 0 35	24 13	1 n 3	5 15	5 30	17 49	27 51	25 46	
20	26 57 51	8 29	2 16	5 22	5 41	18 30	29 3	25 6	
21	27 55 8	22 25	3 19	5 28	5 53	19 11	om 15	24 27	
22	28 52 26	6 1	4 9	5 35	6 4	19 52	1 26	23 49	
23	29 49 45	19 19	4 45	5 41	6 16	20 33	2 38	23 14	
24	30 47 5	2 19	5 5	5 48	6 27	21 14	3 50	22 43	
C	1 44 26	15 5	5 10	5 55	6 39	21 54	5 1	22 17	
26	2 41 48	27 37	4 59	6 2	6 50	22 35	6 12	21 55	
27	3 39 11	9 58	4 35	6 9	7 2	23 15	7 24	21 38	
28	4 36 35	22 8	3 58	6 15	7 14	23 55	8 35	21 25	
29	5 34 0	4 10	3 11	6 22	7 26	24 35	9 47	21 17	
30	6 31 25	16 4	2 16	6 28	7 38	25 15	10 58	21 18	
31	7 28 52	27 54	1 16	6 35	7 50	25 55	12 10	21 27	
M	u's	δ's	♀'s	♂'s	h's	u's	δ's	♀'s	♂'s
D	fets	rises	fets	fets	declin.	declin.	declin.	declin.	declin.
1	10 a 44	om 29	9 a 54	9 a 16	1 n 51	10 n 39	11 n 59	20 n 22	18 n 24
7	10 21	0 12	9 45	8 43	11 38	11 17	13 24	18 25	16 48
13	9 59	11 a 56	9 37	8 3	11 25	10 53	14 43	16 11	15 59
19	9 36	11 41	9 25	rises	11 11	10 28	15 59	13 41	16 9
25	0 14	11 27	0 14	3 m 32	10 56	10 2	17 11	0 17	8

The LUNATIONS.

First quarter the 6th day, at 55 minutes past 6 afternoon.

Full Moon the 13th day, at 48 minutes past 2 afternoon.

Last quarter the 20th day, at 14 minutes past 7 morning.

New Moon the 28th day, at 0 minutes past 7 morning.

M	Sundays & other	☉	☉	☉'s	☉'s	☉ rises	☉	Clock
D	remark. days	rises	sets	declin.	declin.	& sets	South	bef. ☉
1	Sun. af. Trin.	4 20	7 40	18 n 10	8 n 8	8 a 45	2 a 5	5 57
2	[Lammas Day]	4 21	7 39	17 55	2 35	8 56	2 44	5 54
3		4 23	7 37	17 40	3 8	9 5	3 23	5 50
4		4 24	7 36	17 24	8 40	9 15	4 3	5 46
5		4 26	7 34	17 8	14 3	9 28	4 46	5 40
6	Transfiguration	4 28	7 32	16 52	19 0	9 43	5 32	5 35
7	Prs. Amelia bor.	N. of J	7 31	16 35	23 14	10 7	6 23	5 28
8	Sun. af. Tri.	4 31	7 29	16 19	26 26	10 41	7 19	5 21
9		4 33	7 27	16 2	28 14	11 31	8 19	5 14
10	St. Lawrence	4 35	7 25	15 44	28 17	morn	9 22	5 5
11	Duch. Brunf. b.	Do. d. c.	7 24	15 27	26 25	0 42	10 26	4 57
12	Pr. of Wales b.	4 38	7 22	15 9	22 40	2 13	11 26	4 47
13	Old Lammas	4 40	7 20	14 51	17 22	☉ rises	morn	4 37
14	[Assumption]	4 42	7 18	14 33	10 57	7 a 52	0 24	4 27
15	Sun. af. Trin.	4 43	7 17	14 14	3 56	8 6	1 18	4 16
16	D. of York b.	4 45	7 15	13 55	3 n 10	8 18	2 9	4 4
17		4 47	7 13	13 36	9 57	8 32	2 59	3 52
18		4 49	7 11	13 17	16 2	8 50	3 49	3 40
19		4 50	7 10	12 58	21 8	9 10	4 40	3 26
20		4 52	7 8	12 38	25 0	9 39	5 33	3 13
21	D. of Claren. b.	4 54	7 6	12 18	27 29	10 17	6 28	2 59
22	Sun. af. Tri.	4 56	7 4	11 58	28 30	11 8	7 23	2 45
23		4 58	7 2	11 38	28 3	morn	8 17	2 30
24	St. Bartholom.	5 0	7 0	11 18	26 15	0 11	9 9	2 14
25		5 2	6 58	10 57	23 16	1 23	9 59	1 59
26		5 3	6 57	10 36	19 21	2 37	10 45	1 43
27		5 5	6 55	10 15	14 41	3 51	11 29	1 26
28	St. Augustine	5 7	6 53	9 54	9 30	☉ sets	0 a 10	1 9
29	Sun. a. Tri.	5 9	6 51	9 33	4 0	7 a 8	0 49	0 52
30	[J. Bap. beh.	5 11	6 49	9 12	1 40	7 18	1 28	0 35
31		5 13	6 47	8 50	7 19	7 29	2 8	0 7
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	h
D	decreas.	of day	long. ♀	long. ♂	long. ♀	long. ♂	long. ♀	sets
1	1 14	15 20	9 n 40	13 n 20	13 v 27	8 m 26	6 m 50	14 x 7
7	1 32	15 2	9 52	13 48	17 5 14	11 16	26 12 v 52	8 29
13	1 54	14 40	10 5	14 15	20 42	19 57	26 1 16 x 53	8 7
19	2 14	14 20	10 18	14 43	24 16	25 43	5 1 34	24 II 22
25	2 38	13 56	10 30	15 10	27 49	1 x 30	15 6	0 Ω 18

M D	Day-lig begins	Day-lig ends	Durat. twilig.	Pl. (C's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	1 23	10 30	2 56	13 20	1 n 42	1 n 2	1 s 6	1 n 12	3 s 4
7	1 46	10 13	2 41	13 1	1 42	1 1	1 2	0 57	1 28
13	2 7	9 52	2 32	12 42	1 42	1 1	0 51	0 40	0 n 2
19	2 27	9 32	2 23	12 22	1 42	1 1	0 52	0 21	1 n 8
25	2 46	9 13	2 15	12 3	1 42	1 1	0 46	0 0	1 41
M D	C's longitude		C's long.	C's latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
1	Ω	8 26 19	9 m 0	0 n 12	6 m 42	8 m 2	26 8 35	13 m 21	21 m 39
2		9 23 47	21 27	0 s 52	6 49	8 14	27 15	14 32	21 57
3		10 21 16	3 17	1 55	6 56	8 26	27 54	15 43	22 24
4		11 18 45	15 15	2 53	7 3	8 38	28 33	16 54	22 58
5		12 16 16	27 25	3 45	7 10	8 50	29 12	18 5	23 38
6		13 13 46	9 m 51	4 2	7 17	9 2	29 51	19 16	24 23
7		14 11 18	22 39	4 57	7 25	9 15	0 II 30	20 27	25 14
8		15 8 50	5 52	5 13	7 32	9 27	1 9	21 38	26 12
9		16 6 23	19 32	5 12	7 39	9 40	1 47	22 49	27 16
10		17 3 57	3 40	4 52	7 46	9 52	2 25	24 0	28 26
11		18 1 32	18 14	4 14	7 53	10 5	3 3	25 11	29 42
12		18 59 8	3 9	3 17	8 0	10 17	3 41	26 22	1 Ω 3
13		19 56 45	18 17	2 6	8 8	10 30	4 19	27 32	2 29
14		20 54 23	3 29	0 45	8 15	10 43	4 56	28 43	4 0
15		21 52 3	18 35	0 n 38	8 23	10 55	5 34	29 5	5 36
16		22 49 44	3 27	1 58	8 30	11 8	6 11	1 4	7 16
17		23 47 26	17 58	3 8	8 38	11 20	6 49	2 14	9 0
18		24 45 11	2 8 6	4 4	8 45	11 33	7 26	3 24	10 47
19		25 42 57	15 48	4 45	8 53	11 46	8 3	4 34	12 37
20		26 40 44	29 6	5 9	9 0	11 59	8 40	5 44	14 29
21		27 38 34	12 II 3	5 17	9 8	12 11	9 16	6 54	16 23
22		28 36 25	24 40	5 9	9 15	12 24	9 53	8 4	18 19
23		29 34 18	7 5	4 47	9 23	12 36	10 29	9 14	20 16
24		30 32 13	19 11	4 12	9 30	12 49	11 6	10 24	22 14
25		1 30 10	1 Ω 10	3 26	9 38	13 2	11 42	11 33	24 13
26		2 28 9	13 3	2 32	9 45	13 15	12 18	12 43	26 12
27		3 26 9	24 52	1 32	9 53	13 28	12 53	13 52	28 11
28		4 24 11	6 m 39	0 27	10 0	13 41	13 29	15 2	0 m 9
29		5 22 14	18 27	0 s 38	10 8	13 54	14 4	16 11	2 7
30		6 20 19	0 17	1 42	10 15	14 7	14 39	17 21	4 5
31		7 18 26	12 12	2 42	10 23	14 20	15 14	18 30	6 2
M D	u's sets	δ's rises	♀ sets	♂ rises	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	8 a 49	11 a 10	9 a 0	3 m 3	10 n 38	9 n 31	18 n 21	7 n 39	18 n 42
7	8 27	10 58	8 17	2 51	10 22	9 3	19 16	4 40	19 40
13	8 6	10 46	8 34	3 0	10 6	8 35	20 6	1 36	19 41
19	7 46	10 34	8 21	3 28	9 49	8 6	20 50	1 s 30	18 7
25	7 28	10 23	8 8	4 12	9 32	7 37	21 28	4 35	15 3

The LUNATIONS.

First quarter the 5th day, at 41 minutes past 6 morning.

Full Moon the 11th day, at 46 minutes past 10 night.

Last quarter the 18th day, at 36 minutes past 7 afternoon.

New Moon the 26th day, at 56 minutes past 11 night.

M D	Sundays & other remark. days	☉ rites	☉ sets	☉'s declin.	☽'s declin.	☽ rites & sets	☽ South	Clock aft. ☉	
1	Gales	5 15	6 45	8 n 29	12 s 45	7 42	2 50	0 2	
2	Lon. burnt 1666	5 17	6 43	8 7	17 47	7 55	3 34	0 20	
3		5 19	6 41	7 45	22 11	8 15	4 22	0 39	
4	12 Sun. a. Trin.	5 21	6 39	7 23	25 39	8 44	5 15	0 50	
5		5 23	6 37	7 1	27 5	9 25	6 12	1 18	
6		5 24	6 36	6 38	28 32	10 20	7 13	1 37	
7	Enurhus	5 26	6 34	6 10	27 26	11 45	8 14	1 57	
8	Nativity V.M.	5 28	6 32	5 53	24 31	morn	9 15	2 18	
9		5 30	6 30	5 31	19 56	1 18	10 13	2 38	
10		5 32	6 28	5 8	14 1	2 53	11 9	2 59	
11	13 Sun. af. Tri.	5 34	6 26	4 45	7 13	☉ rites	morn	3 19	
12		5 36	6 24	4 22	0 1	6 32	0 1	3 40	
13		5 38	6 22	3 50	7 n 7	6 46	0 53	4 1	
14	Holy Cross	5 40	6 20	3 36	13 43	7 2	1 45	4 22	
15	Ember Week	5 42	6 18	3 13	19 24	7 22	2 37	4 43	
16		5 44	6 16	2 50	23 52	7 45	3 32	5 4	
17	Lambert	5 46	6 14	2 27	26 54	8 22	4 27	5 25	
18		5 48	6 12	2 4	28 22	9 10	5 24	5 46	
19	14 Sun. af. Tri.	5 50	6 10	1 40	28 19	10 10	6 20	6 7	
20		5 52	6 8	1 17	26 5	11 20	7 13	6 28	
21	St. Matthew	5 54	6 6	0 54	24 8	morn	8 4	6 49	
22	K. Geo. III. cr.	5 56	6 4	0 30	20 27	0 34	8 52	7 10	
23		5 58	6 2	0 7	15 58	1 48	9 36	7 31	
24		6 0	6 0	0 8 16	10 55	3 1	10 18	7 51	
25		6 2	5 58	0 40	5 23	4 12	10 58	8 12	
26	15 Sun. af. Tri.	Cypri.	5 57	1 3	0 s 11	☽ sets	11 37	8 32	
27	[O. Holy Reed	6 5	5 55	1 27	5 53	5 a 47	0 a 17	8 52	
28	[Wittem. b.	6 7	5 53	1 5	11 25	6 0	0 59	9 12	
29	St. Michael: D.	6 9	5 51	2 14	16 35	6 13	1 42	9 31	
30	St. Jerome	6 11	5 49	2 37	21 9	6 31	2 29	9 51	
M D	Day decreas.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	h rites
1	3 4	13 30	1 m 45	15 m 43	18 55	8 X 17	26 4 11	3 m 0	5 m 24
7	3 26	13 8	10 58	16 10	5 24	14 6	57 11	2 m 23	5 5
13	3 50	12 44	11 10	16 37	8 50	19 56	15 10 23	40	4 47
19	4 14	12 20	11 23	17 5	12 15	25 47	14 39	12 m 19	4 29
25	4 38	11 56	11 35	17 32	15 37	19 40	4 m 7	29 29	4 12

M D	Day lig begins	Day l. ends	Durat. twilig.	Pl. (C's nove	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	2 7	9 55	2 31	18X12	1 n 50	1 n 11	1 s 26	0 s 11	2 s 17
7	1 45	10 18	2 43	17 53	1 49	1 10	1 27	0 n 4	1 36
13	1 20	10 45	3 1	17 34	1 46	1 9	1 28	0 19	0 41
19	0 48	11 20	3 27	17 15	1 48	1 0	1 29	0 34	0 n 22
25	All day light.			16 56	1 47	1 8	1 29	0 48	1 19

M D	☉'s longitude			☌'s long.			☌'s latitude			h's longit.			u's longit.			♂'s longit.			♀'s longit.			♂'s long.					
1	8	10	21	19	3	8	3	n	32	0	m	35	2	s	55	19	X	50	21	8	47	21	9	56			
G	18	19	29		10	47	4		18	0	37	25	57	20	36	23		1	23		41						
3	12	17	37		0	Π	16	4	50	0	D	37	25	59	21	22	24	15	25		29						
4	13	15	43		13	27	5		5	0	37	26		1	22	8	25	20	27		19						
5	14	13	47		26	17	5		4	0	39	26	3	22	54	26	43	9	10								
6	15	11	49		8	49	4		48	0	36	26	5	23	40	27	57	18	3								
7	16	9	50		21	3	4		19	0	36	26	8	24	25	29	10	2	58								
8	17	7	48		3	Ω	4	3	40	0	36	26	11	25	11	0	Π	24	4	54							
C	18	5	45		14	57	2		51	0	37	26	14	25	57	1	37	6	53								
10	19	3	40		26	46	1		55	0	38	26	17	26	42	2	51	8	54								
11	20	1	33		8	m	37	0	54	0	39	26	20	27	28	4	4	10	56								
12	20	59	24		20	38	0	s	10	0	40	16	23	28	14	5	18	13	0								
13	21	57	13		2	45	1		14	0	41	16	27	28	59	6	31	15	5								
14	22	55	1		15	11	2		16	0	42	16	31	29	45	7	45	17	11								
15	23	52	47		27	56	3		13	0	43	26	35	c	30	8	58	19	19								
C	24	50	32		11	n	1	4	1	0	45	26	40	1	16	10	11	21	28								
17	25	48	15		24	26	4		37	0	46	26	44	2	1	11	25	23	38								
18	26	45	56		8	†	9	4	58	0	47	26	48	2	47	12	39	25	49								
19	27	43	37		22	7	5		2	0	49	26	53	3	32	13	52	28	1								
20	28	41	17		6	16	4		47	0	51	26	58	4	18	15	6	0	Π	13							
21	29	38	55		20	29	4		15	0	53	27	3	5	3	16	19	2	24								
22	II	0	36	33	4	m	44	3	27	0	55	27	8	5	48	17	33	4	35								
C	1	34	9		18	58	2		26	0	57	27	13	6	33	18	46	6	46								
24	2	31	45		3	X	7	1	16	0	59	27	18	7	18	20	0	8	56								
25	3	29	20		17	11	0		2	1	1	27	23	8	5	21	13	11	5								
26	4	26	54		1	9	1	n	12	1	4	27	29	8	48	22	26	13	12								
27	5	24	28		15	0	2		20	1	6	27	35	9	33	23	40	15	18								
28	6	22	1		28	44	3		20	1	9	27	41	10	18	24	53	17	22								
29	7	19	32		12	8	4		7	1	12	27	47	11	3	26	6	19	24								
C	8	17	3		25	42	4		40	1	14	27	53	11	48	27	20	21	24								
31	9	14	33		8	Π	53	4	5	1	17	27	59	12	33	28	32	23	22								
M D	u's sets			♂'s rises			♀ sets			♂ rises			h's declin.			u's declin.			♂'s declin.			♀'s declin.			♂'s declin.		
1	2	m	43	3	m	17	8		27	4	m	16	13	n	1	5	s	21	18	n	4	6	n	26			
7	2	m	20	3		2	8		47	4		10	12	59	14	55	3	35	20		4	11		1			
13	1		57	2		46	9		5	4		6	12	56	13	48	1	45	21		44	15		44			
19	1		34	2		30	9		22	4		2	12	53	13	39	0	n	3	23		3	20	6			
25	1		11	2		13	9		37	4		9	12	48	13	27	1	50	23		58	23		26			

The LUNATIONS.

First quarter the 8th day, at 48 minutes past 12 noon.

Full Moon the 15th day, at 50 minutes past 11 night.

Last quarter the 22d day, at 1 minute past 4 afternoon.

New Moon the 30th day, at 2 minutes before 1 morning.

M	Sundays & other	☉	☉	☉'s	☉'s	☉ rises	☉	Clock	
D	remark. days.	rises	sets	declin.	declin.	& sets	South	aft. ☉	
1	Nicomede	3 52	8 8	22 n 0	28 n 12	9 a 59	0 a 50	2' 43"	
2	[T. d. m.]	3 52	8 8	22 8	28 10	10 48	1 46	2 34	
3	Oxf. T.e. Cam.	3 51	8 9	22 16	26 41	11 22	2 38	2 24	
4	K. Geo. 3 born	3 50	8 10	22 24	23 59	11 45	3 28	2 15	
5	Duke of Cum. b. Bonifa.	8 11	22 31	20 16	morn	4 14	2 4		
6	Whit Sunday	3 48	8 12	22 37	15 47	0 3	4 57	1 54	
7	Whit Monday	3 48	8 12	22 43	10 44	0 16	5 38	1 43	
8	Whit Tuesday	3 47	8 13	22 49	5 17	0 28	6 17	1 32	
9	Ember Week	3 46	8 14	22 55	0 s 25	0 38	6 57	1 21	
10		3 46	8 14	23 0	6 11	0 48	7 38	1 10	
11	St. Barnabas	3 45	8 15	23 4	11 51	0 58	8 21	0 58	
12		3 45	8 15	23 8	17 11	1 10	9 8	0 46	
13	Trinity Sunday	3 44	8 16	23 12	21 54	1 26	10 0	0 34	
14		3 44	8 16	23 16	25 35	1 47	10 58	0 22	
15		3 44	8 16	23 19	27 49	☉ rises morn	0 10		
16	Oxf. T. begins	3 44	8 16	23 21	28 17	9 a 46	0 0	0 b. 3	
17	Alban: Cor. Ch.	3 43	8 17	23 23	26 48	10 29	1 3	0 16	
18	Trin. T. begins	3 43	8 17	23 25	23 29	10 57	2 6	0 29	
19		3 43	8 17	23 26	18 41	11 15	3 5	0 41	
20	2 Sun. af. Trin. Tr. Ed.	8 17	23 27	12 50	11 32	3 59	0 54		
21	Longest Day	3 43	8 17	23 28	6 22	11 44	4 50	1 7	
22		3 43	8 17	23 28	0 n 19	11 56	5 38	1 20	
23		3 43	8 17	23 28	6 52	morn	6 25	1 33	
24	Nati. St. J. Bapt.	3 43	8 17	23 27	12 59	0 8	7 11	1 46	
25		3 43	8 17	23 26	18 25	0 22	8 0	1 59	
26		3 44	8 16	23 24	22 52	0 40	8 50	2 12	
27	2 Sun. af. Trin.	3 44	8 16	23 22	26 6	1 5	9 43	2 24	
28		3 44	8 16	23 20	27 56	1 38	10 37	2 37	
29	St. Peter	3 45	8 15	23 17	28 18	2 24	11 32	2 49	
30		3 45	8 15	23 14	27 12	☉ sets	0 a 26	3 1	
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	h
D	increaf.	of day	long. ♀	long. ♂	long. ♀	long. ♂	long. ♀	long. ♂	feis
1	8 32	16 16	7 31	8 40	5 19	10 12	28 00	17 08	0 m 54
7	8 40	16 24	7 44	9 8	9 8	15 57	7 04	15 55	0 29
13	8 48	16 32	7 57	9 35	12 56	21 40	17 32	9 44	0 4
19	8 50	16 34	8 9	10 3	16 43	27 24	27 17	0 m 1	11 39
25	8 50	16 34	8 22	10 31	20 30	3 07	7 03	18 5	11 14

M D	Daylig. begins	Daylig. ends	Durat. twilig.	Pl. (C's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	4 18	7 42	1 56	10 6	1 45	1 3	0 12	2 34	1 8 19
7	4 31	7 29	1 55	9 47	1 46	1 3	0 12	2 57	2 0
13	4 43	7 17	1 54	9 28	1 46	1 4	0 23	3 1	2 35
19	4 55	7 5	1 54	9 9	1 47	1 5	0 35	3 36	2 58
25	5 4	6 56	1 55	8 50	1 48	1 5	0 4	3 50	3 1
M D	☉'s longitude		☾'s long.	☾'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
1	7 34	17	28 37	5 5 6	14 14	21 0	1 14	23 12	27 52
2	8 33	24	11 30	5 14	14 21	1 13	1 40	24 20	29 17
C	9 32	33	24 39	5 5 14	28 21	25	2 5	25 31	0 11 44
4	10 31	43	8 0	4 40	14 35	21 38	2 30	26 35	7 2
5	11 30	55	21 53	3 59	14 42	21 51	2 55	27 40	3 25
6	12 30	9	5 39	3 2	14 4	22 3	3 20	28 45	4 42
7	13 29	24	20 23	1 52	14 56	22 16	3 45	29 49	6 3
8	14 28	41	5 4	0 34	15 3	22 27	4 9	30 53	7 24
9	15 28	1	19 56	0 47	15 10	22 41	4 32	1 56	8 39
C	16 27	22	4 53	2 5	15 17	22 53	4 55	2 5	9 53
11	17 26	45	19 47	3 14	15 24	23 6	5 17	4 2	11 0
12	18 26	10	4 28	4 10	15 31	23 18	5 39	5 5	12 18
13	19 25	37	18 51	4 48	15 37	23 31	6 1	6 8	13 29
14	20 25	6	2 49	5 8	15 44	23 43	6 22	7 10	14 38
15	21 24	38	16 21	5 9	15 51	23 56	6 43	8 11	15 44
16	22 24	12	29 20	4 55	15 57	24 8	7 3	9 13	16 48
C	23 23	48	12 6	4 26	16 4	24 20	7 22	10 14	17 50
18	24 23	27	24 25	3 45	16 11	24 32	7 42	11 15	18 49
19	25 23	8	6 29	2 55	16 17	24 44	8 1	12 16	19 45
20	26 22	51	18 22	1 59	16 24	24 56	8 19	13 16	20 38
21	27 22	37	0 9	0 57	16 30	25 8	8 36	14 15	21 27
22	28 22	25	11 56	0 8	16 36	25 20	8 53	15 15	22 13
23	29 22	15	23 46	1 10	16 43	25 32	9 9	16 14	22 56
C	0 22	8	5 44	2 10	16 49	25 44	9 26	17 13	23 30
25	1 22	2	17 52	3 6	16 55	25 55	9 42	18 12	24 1
26	2 21	59	0 11	3 54	17 1	26 7	9 57	19 10	24 20
27	3 21	58	12 44	4 31	17 7	26 18	10 11	20 8	24 44
28	4 21	58	25 29	4 56	17 13	26 30	10 25	21 5	24 56
29	5 22	1	8 27	5 5	17 18	26 41	10 38	22 2	25 0
30	6 22	5	21 37	4 59	17 24	26 53	10 50	22 58	24 55
C	7 22	10	4 59	4 37	17 30	27 4	11 2	23 53	24 40
M D	☾ rises	♂ rises	♀ sets	♂ sets	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	4 35	9 18	7 1	6 16	7 49	4 32	23 30	21 8	11 57
7	4 21	9 7	6 53	6 6	7 34	4 23	23 37	21 3	15 26
13	4 6	8 55	6 46	5 55	7 19	3 33	23 43	24 36	18 27
19	3 50	8 42	6 40	5 43	7 4	3 5	23 47	25 52	20 33
25	3 33	8 24	6 36	5 30	6 50	2 28	23 55	26 8	21 44

The LUNATIONS.

First quarter the 8th day, at 57 minutes past 4 morning.

Full Moon the 15th day, at 28 minutes past 7 morning.

Last quarter the 21st day, at 22 minutes past 10 night.

New Moon the 29th day, at 4 minutes past 3 afternoon.

M	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock bef. ☉	
1		3 46	8 14	23 n 10	24 n 48	9 a 43	1 a 16	3' 13"	
2	Visita. of V. M.	3 46	8 14	23 6	21 20	10 3	2 4	3 25	
3	Dog days begin	3 47	8 13	23 2	17 2	10 18	2 48	3 37	
		3 47	8 13	22 57	12 6	10 29	3 29	3 48	
5	[Tra. St. Mar.]	3 48	8 12	22 52	6 46	10 39	4 8	3 59	
6	Cam. C. O. Midf.	3 49	8 11	22 46	1 10	10 48	4 47	4 9	
7	Trin. Ter. ends	3 49	8 11	22 40	4 s 31	10 58	5 27	4 19	
8	[Tho. à Becket]	3 50	8 10	22 34	10 8	11 9	6 8	4 29	
9	Camb. T. ends	3 51	8 9	22 27	15 31	11 24	6 53	4 38	
10		3 52	8 8	22 20	20 22	11 43	7 42	4 47	
		3 53	8 7	22 12	24 24	morn	8 36	4 56	
12	Oxford Act	3 54	8 6	22 4	27 12	0 10	9 35	5 4	
13		3 55	8 5	21 56	28 23	0 52	10 39	5 11	
14		3 56	8 4	21 47	27 38	1 53	11 43	5 18	
15	Swithin	3 57	8 3	21 38	24 56	☽ rises morn		5 25	
16		3 58	8 2	21 29	20 27	9 a 14	0 45	5 31	
17	Oxford Ter. e.	3 59	8 1	21 19	14 45	9 32	1 43	5 37	
		4 0	8 0	21 9	8 13	9 46	2 38	5 42	
19	[5 Sun. aft. Trin.]	4 1	7 59	20 58	1 20	9 59	3 28	5 47	
20	Margaret	4 3	7 57	20 47	5 n 27	10 10	4 17	5 51	
21		4 4	7 56	20 36	11 49	10 25	5 4	5 54	
22	Magdalen	4 5	7 55	20 25	17 28	10 41	5 53	5 58	
23		4 7	7 53	20 13	22 8	11 4	6 43	6 0	
24		4 8	7 52	20 0	25 38	11 34	7 35	6 2	
	[St. James]	4 9	7 51	19 48	27 45	morn	8 29	6 4	
26	St. Anne	4 11	7 49	19 35	28 26	0 15	9 23	6 4	
27		4 12	7 48	19 22	27 39	1 11	10 17	6 5	
28		4 14	7 46	19 8	25 34	2 17	11 9	6 4	
29		4 15	7 45	18 54	22 20	☽ sets	11 57	6 4	
30		4 17	7 43	18 40	18 12	8 a 22	0 a 43	6 2	
31		4 18	7 42	18 25	13 24	8 34	1 25	6 0	
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	☽	
D	decreasf.	of day	long. ♀	long. ♀	long. ♂	long. ☉	long. ♀	long. ♀	sets
1	0 6	16 28	8 m 34	10 m 58	24 x 17	8 v 51	16 m 47	4 f 57	10 a 50
7	0 12	16 22	8 47	10 26	28 2	14 34	26 31	21 27	10 26
13	0 24	16 10	9 0	11 53	1 v 46	20 17	6 a 14	8 v 19	10 3
19	0 36	15 58	9 12	12 21	5 29	26 1	15 56	26 21	9 40
25	0 52	15 42	9 25	12 48	9 10	1 m 44	25 36	16 m 28	9 17

M D	Daylig. begins	Daylig. ends	Durat. twilig.	Pl. D's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1				14X58	1 n 43	1 n 3	1 s 23	1 n 41	1 s 33
7	All	day	light.	14 39	1 43	1 3	1 21	1 41	3 4
13				14 20	1 42	1 2	1 18	1 39	4 21
19				14 1	1 42	1 2	1 15	1 33	4 56
25	0 45	11 10	3 20	13 42	1 42	1 2	1 11	1 25	4 32
M D	☉'s longitude	☽'s long.	☿'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.	♂'s long.
1	☉ 8 50 40	25☽21	3 n 47	3☿28	2☿17	58 14	6☿12	1☿10	
2	9 47 54	7☽24	3 0	3 33	2 27	5 57	7 25	1 30	
3	10 45 7	19 18	2 5	3 39	2 37	6 39	8 37	1 43	
C	11 42 21	1☿7	1 5	3 44	2 48	7 22	9 49	1 49	
5	12 39 34	12 54	0 2	3 50	2 58	8 4	11 2	1R 51	
6	13 36 47	24 43	1 s 1	3 55	3 8	8 47	12 14	1 50	
7	14 33 59	6☽40	2 2	4 1	3 19	9 29	13 26	1 45	
8	15 31 12	18 50	2 59	4 7	3 30	10 11	14 38	1 30	
9	16 28 24	1☿18	3 49	4 3	3 40	10 53	15 51	1 22	
10	17 25 36	14 9	4 28	4 9	3 51	11 35	17 3	1 2	
11	18 22 48	27 27	4 55	4 5	4 12	12 17	18 15	0 38	
12	19 20 1	11☽11	5 7	4 1	4 12	12 59	19 27	0 10	
13	20 17 13	25 23	5 0	4 37	4 23	13 41	20 39	29☽39	
14	21 14 25	9☿58	4 33	4 43	4 34	14 22	21 51	29 5	
15	22 11 38	24 50	3 49	4 49	4 45	15 4	23 3	28 28	
16	23 8 52	9☽49	2 47	4 56	4 56	15 45	24 15	27 48	
17	24 6 6	24 48	1 35	5 2	5 7	16 27	25 27	27 7	
C	25 3 20	9☿38	0 16	5 8	5 18	17 8	26 39	26 26	
19	26 0 35	24 13	1 n 3	5 15	5 30	17 49	27 51	25 46	
20	26 57 51	8☿29	2 16	5 22	5 41	18 30	29 3	25 6	
21	27 55 8	22 25	3 19	5 28	5 53	19 11	☽15	24 27	
22	28 52 26	68 1	4 9	5 35	6 4	19 52	1 26	23 49	
23	29 49 45	19 19	4 45	5 41	6 16	20 33	2 38	23 14	
24	☽ 0 47 5	2☿19	5 5	5 48	6 27	21 14	3 50	22 43	
C	1 44 26	15 5	5 10	5 55	6 39	21 54	5 1	22 17	
26	2 41 48	27 37	4 59	6 2	6 50	22 35	6 12	21 55	
27	3 39 11	9☽58	4 35	6 9	7 23	23 15	7 24	21 38	
28	4 36 35	22 8	3 58	6 15	7 14	23 55	8 35	21 25	
29	5 34 0	4☽10	3 11	6 22	7 26	24 35	9 47	21☿17	
30	6 31 25	16 4	2 16	6 28	7 38	25 15	10 58	21 18	
31	7 28 52	27 54	1 16	6 35	7 50	25 55	12 10	21 27	
M D	u's fets	δ's rises	♀'s fets	♂'s fets	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	10 a 44	om 29	9 a 54	9 a 16	11 n 51	10 n 39	11 n 59	20 n 22	18 n 24
7	10 21 0	12	9 45	8 43	11 38	11 17	13 24	18 25	16 48
13	9 59	11 a 56	9 37	8 3	11 25	10 53	14 43	16 11	15 59
19	9 36	11 41	9 25	rises	11 11	10 28	15 59	13 41	16 9
25	0 14	11 27	0 14	3 m 32	10 56	10 2	17 7	11 0	17 8

The LUNATIONS.

First quarter the 6th day, at 55 minutes past 6 afternoon.

Full Moon the 13th day, at 48 minutes past 2 afternoon.

Left quarter the 20th day, at 14 minutes past 7 morning.

New Moon the 28th day, at 0 minutes past 7 morning.

M	Sundays & other remark. days	☉ rises	☉ sets	☉'e declin.	☉'s declin.	☉ rises & sets	☉ South	Clock bef. ☉
1	Sun. af. Trin.	4 20	7 40	18 n 10	8 n 8	8 a 45	2 a 5	5' 57"
2	[Lammas Day	4 21	7 39	17 55	2 35	8 56	2 44	5 54
3		4 23	7 37	17 40	3 4	9 5	3 23	5 50
4		4 24	7 36	17 24	8 40	9 15	4 3	5 46
5		4 26	7 34	17 8	14 3	9 28	4 46	5 40
6	Transfiguration	4 28	7 32	16 52	19 0	9 43	5 32	5 35
7	Pis. Amelis bor.	N 1 of J	7 31	16 35	23 14	10 7	6 23	5 28
8	Sun. af. Tri.	4 31	7 29	16 19	26 26	10 41	7 19	5 21
9		4 33	7 27	16 2	28 14	11 31	8 19	5 14
10	St. Lawrence	4 35	7 25	15 44	28 17	morn	9 22	5 5
11	Duch. Brunf. b.	Do. d. c.	7 24	15 27	26 25	0 42	10 26	4 57
12	Pr. of Wales b.	4 38	7 22	15 9	22 40	2 13	11 26	4 47
13	Old Lammas	4 40	7 20	14 51	17 22	☉ rises	morn	4 37
14	[Assumption	4 42	7 18	14 33	10 57	7 a 52	0 24	4 27
15	Sun. af. Trin.	4 43	7 17	14 14	3 56	8 6	1 18	4 16
16	D. of York b.	4 45	7 15	13 55	3 n 10	8 18	2 9	4 4
17		4 47	7 13	13 36	9 57	8 32	2 59	3 52
18		4 49	7 11	13 17	16 3	8 50	3 49	3 40
19		4 50	7 10	12 58	21 8	9 10	4 40	3 26
20		4 52	7 8	12 38	25 0	9 39	5 33	3 13
21	D. of Claren. b.	4 54	7 6	12 18	27 29	10 17	6 28	2 59
22	Sun. af. Tri.	4 56	7 4	11 58	28 30	11 8	7 23	2 45
23		4 58	7 2	11 38	28 3	morn	8 17	2 30
24	St. Bartholom.	5 0	7 0	11 18	26 15	0 11	9 9	2 14
25		5 2	6 58	10 57	23 16	1 23	9 59	1 59
26		5 3	6 57	10 36	19 21	2 37	10 45	1 43
27		5 5	6 55	10 15	14 41	3 51	11 29	1 26
28	St. Augustine	5 7	6 53	9 54	9 30	☉ sets	0 a 10	1 9
29	Sun. 2. Tri.	5 9	6 51	9 33	4 0	7 a 8	0 40	0 52
30	[J. Bap. beh.	5 11	6 49	9 12	1 40	7 18	1 28	0 35
31		5 13	6 47	8 50	7 19	7 29	2 8	0 7
M	Day	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	h
D	decreaf.	of day	long. ♀	long. ♀	long. ♂	long. ⊖	long. ♀	sets
1	I 14	15 20	9 n 40	13 m 20	13 v 27	8 m 26	6 m 50	14 x 7
7	I 32	15 2	9 52	13 48	17 5	14 11	16 26	12 v 52
13	I 54	14 40	10 5	14 15	20 42	19 57	26 1	16 x 53
19	2 14	14 20	10 18	14 43	24 16	25 43	5 34	24 II 22
25	2 38	13 56	10 30	15 10	27 49	28 50	15 6	0 Ω 18

M D	Day-lig begins	Day-lig ends	Durat. twilig.	Pl. C's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	1 23	10 30	2 56	3 20	1 n 42	1 n 2	1 s 6	1 n 12	3 s 4
7	1 46	10 13	2 43	13 1	1 42	1 1	1 2	0 57	1 28
13	2 7	9 52	2 32	12 42	1 42	1 1	0 51	0 40	0 n 2
19	2 27	9 32	2 23	12 22	1 42	1 1	0 52	0 21	1 8
25	2 46	9 13	2 15	12 3	1 42	1 1	0 46	0 0	1 41
M D	☉'s longitude	☌'s long.	☌'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.	
1	Ω 8 26 19	9 m 20	0 n 12	6 m 42	8 m 2	26 8 35	13 m 21	21 m 39	
2	9 23 47	21 27	0 s 52	6 49	8 14 27	15 14 32	21 57		
3	10 21 16	3 17	1 55	6 56	8 26 27	54 15 43	22 24		
4	11 18 45	15 15	2 53	7 3	8 38 28	33 16 54	22 58		
5	12 16 16	27 25	3 45	7 10	8 50 29	12 18 5	23 38		
6	13 13 46	9 m 51	4 2	7 17	9 2 29	51 19 16	24 23		
7	14 11 18	22 39	4 57	7 25	9 15 0	11 30 20	27 14		
C	15 8 50	5 52	5 13	7 32	9 27 1	9 21 38	26 12		
9	16 6 23	19 32	5 12	7 39	9 40 1	47 22 49	27 16		
10	17 3 57	3 40	4 52	7 46	9 52 2	25 24 0	28 26		
11	18 1 32	18 14	4 14	7 53	10 5 3	3 25 11	29 47		
12	18 59 8	3 9	3 17	8 0	10 17 3	41 26 22	1 Ω 3		
13	19 56 45	18 17	2 6	8 8	10 30 4	19 27 32	2 29		
14	20 54 23	3 29	0 45	8 15	10 43 4	56 28 43	4 0		
C	21 52 3	18 35	0 n 38	8 23	10 55 5	34 29 5	5 36		
16	22 49 44	3 27	1 58	8 30	11 8 6	11 1 4	7 16		
17	23 47 26	17 58	3 8	8 38	11 20 6	49 2 14	9 0		
18	24 45 11	2 8 6	4 4	8 45	11 33 7	26 3 24	10 47		
19	25 42 57	15 48	4 45	8 53	11 46 8	3 4 34	12 37		
20	26 40 44	29 6	5 9	9 0	11 59 8	40 5 44	14 29		
21	27 38 34	12 11 3	5 17	9 8	12 11 9	16 6 54	16 23		
C	28 36 25	24 40	5 9	9 15	12 24 9	53 8 4	18 19		
23	29 34 18	7 1	4 47	9 23	12 36 10	29 9 14	20 16		
24	30 32 13	19 11	4 12	9 30	12 49 11	6 10 24	22 14		
25	1 30 10	1 Ω 10	3 26	9 38	13 2 11	42 11 33	24 13		
26	2 28 9	13 3	2 32	9 45	13 15 12	18 12 43	26 12		
27	3 26 9	24 52	1 32	9 53	13 28 12	53 13 52	28 11		
28	4 24 11	6 m 39	0 27	10 0	13 41 13	29 15 2	0 m 9		
C	5 22 14	18 27	0 s 38	10 8	13 54 14	4 16 11	2 7		
30	6 20 19	0 17	1 42	10 15	14 7 14	39 17 21	4 5		
31	7 18 26	12 12	2 42	10 23	14 20 15	14 18 30	6 2		
M D	u's sets	δ's rises	♀'s sets	♂'s rises	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	8 a 49	11 a 10	9 a 0	3 m 3	10 n 38	9 n 31	18 n 21	7 n 30	18 n 42
7	8 27 10	58	8 17	2 51	10 22	9 3	19 16	4 40	19 40
13	8 6 10	46	8 34	3 0	10 6	8 35	20 6	1 36	19 41
19	7 46 10	34	8 21	3 28	9 49	8 6	20 50	1 s 30	18 7
25	7 28 10	23	8 8	4 12	9 32	7 37	21 28	4 35	15 3

The LUNATIONS.

First quarter the 5th day, at 41 minutes past 6 morning.
 Full Moon the 11th day, at 46 minutes past 10 night.
 Last quarter the 18th day, at 36 minutes past 7 afternoon.
 New Moon the 26th day, at 56 minutes past 11 night.

M D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾ rises & sets	☾ South	Clock aft. ☉	
1	Giles	5 15	6 45	8 n 29	12 s 45	7 42	2 50	0 2	
2	Lon. burnt 1666	5 17	6 43	8 7	17 47	7 55	3 34	0 20	
3		5 19	6 41	7 45	22 11	8 15	4 22	0 39	
4	12 Sun. a. Trin.	5 21	6 39	7 23	25 39	8 44	5 15	0 58	
5		5 23	6 37	7 1	27 5	9 25	6 12	1 18	
6		5 24	6 36	6 38	28 32	10 26	7 13	1 37	
7	Enurchus	5 26	6 34	6 10	27 26	11 45	8 14	1 57	
8	Nativity V.M.	5 28	6 32	5 53	24 31	morn	9 15	2 18	
9		5 30	6 30	5 31	19 56	1 18	10 13	2 38	
10		5 32	6 28	5 8	14 1	2 53	11 9	2 59	
11	13 Sun. af. Tri.	5 34	6 26	4 45	7 13	☾ rises morn		3 19	
12		5 36	6 24	4 22	0 1	6 32	0 1	3 40	
13		5 38	6 22	3 57	7 n 7	6 46	0 53	4 1	
14	Holy Cross	5 40	6 20	3 36	13 43	7 2	1 45	4 22	
15	Ember Week	5 42	6 18	3 13	19 24	7 22	2 37	4 43	
16		5 44	6 16	2 50	23 52	7 46	3 32	5 4	
17	Lambert	5 46	6 14	2 27	26 54	8 22	4 27	5 25	
18		5 48	6 12	2 4	28 22	9 10	5 24	5 46	
19	14 Sun. af. Tri.	5 50	6 10	1 40	28 19	10 10	6 20	6 7	
20		5 52	6 8	1 17	26 50	11 20	7 13	6 28	
21	St. Matthew	5 54	6 6	0 54	24 8	morn	8 4	6 49	
22	K. Geo. III. cr.	5 56	6 4	0 30	20 27	0 34	8 52	7 10	
23		5 58	6 2	0 7	15 58	1 48	9 36	7 31	
24		6 0	6 0	0 16	10 55	3 1	10 18	7 51	
25		6 2	5 58	0 40	5 23	4 12	10 58	8 12	
26	15 Sun. af. Tri.	Cypri.	5 57	1 3	0 s 11	☾ sets	11 37	8 32	
27	[O. Holy Reoo	6 5	5 55	1 27	5 53	5 47	0 a 17	8 52	
28	[Wirtm. b.	6 7	5 53	1 50	11 25	6 0	0 59	9 12	
29	St. Michael: D.	6 9	5 51	2 14	16 35	6 13	1 42	9 31	
30	St. Jerome	6 11	5 49	2 37	21 9	6 31	2 29	9 51	
M D	Day decreaf.	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	h rises
1	3 4	13 30	10 m 45	15 m 43	18 55	8 X 17	26 4 11	7 m 0	5 m 24
7	3 26	13 8	10 58	16 10	5 24	14 6	5 11	2 23	5 5
13	3 50	12 44	11 50	16 37	8 50	19 56	5 10 23	4 40	4 47
19	4 14	12 20	11 23	17 5	12 15	25 47	14 39	12 m 19	4 29
25	4 38	11 56	11 35	17 32	15 37	19 40	4 7	29 29	4 12

M D	Day begins	Daylig. ends.	Durat. twilig.	Pl. C's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	3 6	8 55	2 3	11 41	1 42	1 1	0 32	0 28	1 43
7	3 22	8 37	2 4	11 22	1 42	1 1	0 3	0 52	1 23
13	3 37	8 23	2 0	11 3	1 43	1 2	0 24	1 18	0 49
19	3 51	8 8	1 58	10 44	1 43	1 2	0 16	1 44	0 9
25	4 4	7 54	1 56	10 25	1 43	1 2	0 7	2 9	0 35
M D	☉'s longitude		☌'s long	☌'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
1	178	10 34	24 15	3 36	10 23	14 53	15 14	19 39	7 12 58
2	9	14 43	6 11 30	4 2	10 38	14 40	16 25	20 40	9 54
3	10	12 54	18 58	4 54	10 4	14 59	16 57	21 57	11 48
4	11	11 6	1 45	5 13	10 5	15 12	17 31	23 6	13 40
C	12	9 20	11 53	5 18	11 1	15 25	18 5	24 15	15 32
6	13	7 35	28 25	5 5	11 8	15 38	18 39	25 24	17 23
7	14	5 51	1 21	4 34	11 16	15 51	19 12	26 35	19 13
8	15	4 9	26 43	3 45	11 24	16 4	19 45	27 42	21 2
9	16	2 29	11 27	2 40	11 31	16 17	20 17	28 50	22 49
10	17	0 50	26 27	1 24	11 38	16 30	20 50	29 58	24 35
11	17	59 13	11 37	0 0	11 46	16 43	21 22	30 6	26 20
C	18	57 3	20 47	1 23	11 54	16 56	21 55	2 14	28 4
13	19	55 4	1 47	2 40	12 1	17 9	22 27	3 22	29 47
14	20	54 33	25 30	3 44	12 9	17 22	22 58	4 30	1 29
15	21	53 3	10 49	4 3	12 17	17 35	23 29	5 37	3 10
16	22	51 36	24 41	5 4	12 24	17 48	24 0	6 45	4 50
17	23	50 11	8 11 6	5 17	12 31	18 1	24 31	7 52	6 29
18	24	48 48	21 6	5 13	12 39	18 14	25 2	9 0	8 7
C	25	47 28	3 42	4 54	12 46	18 26	25 33	10 7	9 44
20	26	46 10	16 9	4 22	12 53	18 39	26 3	11 14	11 20
21	27	44 54	28 4	3 39	13 1	18 5	26 33	12 2	12 55
22	28	43 41	9 58	2 47	13 8	19 5	27 2	13 27	14 28
23	29	42 30	21 47	1 48	13 16	19 18	27 31	14 34	16 1
24	30	41 21	3 33	0 48	13 23	19 31	28 0	15 41	17 33
25	1	40 14	15 21	0 20	13 3	19 44	28 29	16 47	19 4
C	2	39 10	27 13	1 25	13 38	19 57	28 57	17 53	20 34
27	3	38 7	9 10	2 26	13 45	20 9	29 24	18 50	22 3
28	4	37 7	21 16	3 21	13 52	20 22	29 52	20 42	23 32
29	5	36 9	3 31	4 8	14 0	20 35	30 19	21 10	25 0
30	6	35 12	15 58	4 44	14 7	20 47	30 47	22 16	26 26
M D	☌ rites	♂ rites	♀ lets	♂ lets	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	5m 45	10 a 11	7 a 54	6 a 59	9 n 13	7 n 2	22 n 5	8 s 8	10 n 11
7	5 32	10 1	7 43	6 53	8 56	6 32	22 31	11 4	5 33
13	5 18	9 51	7 31	6 46	8 39	6 2	22 51	13 52	0 50
19	5 4	9 41	7 20	6 36	8 22	5 32	23 8	16 31	3 s 43
25	4 49	9 30	7 11	6 26	8 6	5 2	23 21	18 56	8 1

The LUNATIONS.

First quarter the 4th day, at 36 minutes past 4 afternoon.

Full Moon the 11th day, at 58 minutes past 7 morning.

Last quarter the 18th day, at 56 minutes past 11 morning.

New Moon the 26th day, at 34 minutes past 4 afternoon.

M	Sundays & other D remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾ rises & sets	☾ South	Clock aft. ☉	
1	Remigius	6 13	5 47	3 8	24 51	6 a 56	3 a 20	10 10	
2		6 15	5 45	3 24	27 22	7 32	4 15	10 29	
3	C 16 Sun. aft. Tri.	6 17	5 43	3 47	28 27	8 26	5 13	10 48	
4		6 19	5 41	4 10	27 53	9 37	6 13	11 6	
5		6 21	5 39	4 34	25 37	11 1	7 12	11 24	
6	Faith	6 23	5 37	4 57	21 44	morn	8 9	11 42	
7		6 25	5 35	5 20	16 29	0 32	9 3	11 59	
8		6 27	5 33	5 43	10 12	2 4	9 56	12 10	
9	Denys	6 29	5 31	6 6	3 16	3 39	10 47	12 32	
10	C 17 Sun. a. Tri.	6 31	5 29	6 29	3 n 52	5 2	11 38	12 49	
11	Olav. M. c. [Ox &	C. T. b.	5 27	6 51	10 45	☾ rises	morn	13 4	
12		6 35	5 25	7 14	16 56	5 a 32	0 30	13 19	
13	Tr. K. Edw. C.	6 37	5 23	7 37	22 3	5 55	1 25	13 34	
14		6 39	5 21	7 59	25 46	6 26	2 21	13 48	
15		6 41	5 19	8 22	27 53	7 9	3 10	14 2	
16	[Etheldred	6 43	5 17	8 44	28 23	8 7	4 17	14 15	
17	C 18 Sun. af. Tri.	6 44	5 16	9 6	27 19	9 14	5 13	14 27	
18	St. Luke	6 46	5 14	9 28	24 57	10 28	6 6	14 39	
19		6 48	5 12	9 50	21 30	11 41	6 55	14 50	
20		6 50	5 10	10 11	17 13	morn	7 40	15 1	
21		6 52	5 8	10 33	12 20	0 54	8 23	15 11	
22		6 54	5 6	10 55	7 0	2 6	9 3	15 20	
23		6 56	5 4	11 16	1 25	3 16	9 42	15 28	
24	C 19 Sun. af. Tri.	6 58	5 2	11 37	4 s 16	4 27	10 22	15 36	
25	K. Geo. 3. acc.	Crispin	5 0	12 53	9 53	5 39	11 3	15 43	
26	K. Geo. 3. proc.	7 2	4 59	12 19	15 11	☾ sets	11 46	15 50	
27		7 3	4 58	12 39	19 59	4 a 43	0 a 32	15 56	
28	St. Sim. & Jude	7 5	4 57	12 50	23 56	5 7	1 22	16 1	
29		7 7	4 55	13 20	26 45	5 40	2 16	16 5	
30		7 9	4 51	13 39	28 11	6 28	3 14	16 8	
31	C 20 Sun. af. Tri.	7 11	4 49	13 50	27 59	7 33	4 12	16 11	
M	Day	Length of day	Helioc. long. ♀	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ☉	Helioc. long. ♀	Helioc. long. ♂	h rites
1	5 0	11 34	11 48	18 0	18 58	7 34	13 36	16 10	3 m 54
7	5 24	11 10	12 0	18 27	22 16	13 30	23 6	20 54	3 36
13	5 48	10 46	12 13	18 55	25 37	19 26	28 35	24 13	3 17
19	6 10	10 24	12 26	19 22	28 47	25 23	32 6	28 31	2 59
25	6 36	9 58	12 38	19 49	31 50	28 21	35 18	31 40	2 40

M D	Daylig. begins	Daylig. ends	Durat. twilig.	Pl. (s node	h's latitude	u's latitude	♂'s latitude	♀'s latitude	♂'s latitude
1	4 18	7 42	1 56	10X 6	1 11 45	1 11 3	0 11 2	2 s 34	1 8 10
7	4 31	7 29	1 53	9 47	1 46	1 3	0 12	2 s 57	2 0
13	4 43	7 17	1 54	9 28	1 46	1 4	0 23	3 1	2 35
19	4 55	7 5	1 54	9 9	1 47	1 5	0 35	3 36	2 58
25	5 4	6 56	1 55	8 50	1 48	1 5	0 4	3 50	3 1
M D	☉'s longitude		☌'s long.	☌'s latitude	h's long.	u's long.	♂'s long.	♀'s long.	♂'s long.
1	7 34	17	28m 37	5 s 6	14 14	21 10 0	125 14	23 11 21	27 25 52
2	8 33	24	11 4 30	5 14 14	21 13	1 40	24 20 29	17	
C	9 32	33	24 39	5 5 14	28 21	25	2 5	25 31	0 11 40
4	10 31	43	8 15 0	4 40 14	35 21	38	2 30	26 35	7 2
5	11 30	55	21 53	3 59 14	42 21	51	2 55	27 40	3 25
6	12 30	9	5 59	3 2 14	4 22	3	3 20	28 45	4 42
7	13 29	24	20 23	1 52 14	50 22	16	3 45	29 49	6 3
8	14 28	41	5X 4	0 34 15	3 22	28	4 9	0 4 53	7 24
9	15 28	1	19 56	0 n 47 15	10 22	41	4 32	1 50	8 39
C	16 27	22	4Y 53	2 5 15	17 22	53	4 55	2 5	9 53
11	17 26	45	19 47	3 14 15	24 23	6	5 17	4 2	11 0
12	18 26	10	4 8 28	4 10 15	31 23	18	5 39	5 5	12 18
13	19 25	37	18 51	4 48 15	37 23	31	6 1	6 8	13 28
14	20 25	6	2 11 49	5 8 15	44 23	43	6 22	7 10	14 38
15	21 24	38	16 21	5 9 15	51 23	56	6 43	8 11	15 44
16	22 24	12	29 26	4 55 15	57 24	8	7 3	9 13	16 48
C	23 23	48	12 26 6	4 26 16	4 24	20	7 22	10 14	1 50
18	24 23	27	24 25	3 45 16	11 24	32	7 42	11 15	18 49
19	25 23	8	6 29	2 55 16	17 24	44	8 1	12 16	19 46
20	26 22	51	18 22	1 59 16	24 24	56	8 19	13 16	20 38
21	27 22	37	0m 9	0 57 16	30 25	8	8 36	14 15	21 27
22	28 22	25	11 56	0 8 16	36 25	20	8 53	15 15	22 13
23	29 22	15	23 46	1 10 16	43 25	32	9 9	16 14	22 50
Cm	0 22	8	5 44	2 10 16	49 25	44	9 26	17 13	23 30
25	1 22	2	17 52	3 6 16	55 25	55	9 42	18 12	24 1
26	2 21	59	cm 11	3 54 17	1 26	7	9 57	19 10	24 20
27	3 21	58	12 44	4 31 17	7 26	18	10 11	20 8	24 44
28	4 21	58	25 29	4 56 17	13 26	30	10 25	21 5	24 56
29	5 22	1	8 27	5 5 17	18 26	41	10 38	22 25	25 R 0
30	6 22	5	21 37	4 59 17	24 26	53	10 50	22 58	24 55
C	7 22	10	4 59	4 37 17	30 27	4	11 2	23 53	24 40
M D	u rises	♂ rises	♀ sets	♂ sets	h's declin.	u's declin.	♂'s declin.	♀'s declin.	♂'s declin.
1	4m 35	9 18	7 a 1	6 a 16	7 n 49	4 32	23 30	21 8	7 11 57
7	4 21	9 7	6 53	6 6	7 34	4 2	23 37	23 1	15 26
13	4 6	8 55	6 46	5 55	7 19	3 33	23 42	24 36	18 27
19	3 50	8 42	6 40	5 43	7 4	3 5	23 48	25 52	20 33
25	3 33	8 24	6 36	5 30	6 50	2 28	23 55	26 2	21 40

The LUNATIONS.

First quarter the 3d day, at 11 minutes past 1 morning.
 Full Moon the 9th day, at 47 minutes past 6 evening.
 Last quarter the 17th day, at 48 minutes past 7 morning.
 New Moon the 25th day, at 55 minutes past 7 morning.

(iv) D	Sundays & other remark. days	☉ rises	☉ sets	☉'s declin.	☾'s declin.	☾'s & sets	☾ South	Clock aft. ☉
1	Alt. Sabote	7 13	4 47	14 5 19	20 8 7	8 a 54	5 a 12	16 13
2	Du. of Kent bo.	All South	4 46	14 3 38	22 42 10	10 1 1	6 7	16 14
3	Prs. Sophia born	7 10	4 44	14 5 57	17 56 11	4 48	7 5	16 14
4	K. William lag.	7 18	4 42	15 10 12	8 morn	7 51	7 51	16 14
5	Powder Plot	7 20	4 40	15 34 5	37 1 16	8 40	16 13	
6	Mic. Term. of Lyp.	7 21	4 39	15 53 11	13 2 43	9 29	16 11	
7	21 Sun. af. Trin.	7 23	4 37	16 11 8	2 4 10	10 19	16 8	
8	Prs. Aug. So. b.	7 25	4 35	16 28 14	25 5 37	11 11	16 4	
9	Lord Mayor's d.	7 26	4 34	16 40 19	57 Drises	morn	16 0	
10		7 28	4 32	17 3 14	16 4 a 24	0 6	15 55	
11	St. Martin	7 30	4 30	17 20 27	4 5 0	1 4	15 48	
12	Sam. T. div. m.	7 32	4 28	17 36 28	12 5 54	2 2	15 41	
13	Brius	7 33	4 27	17 53 27	41 6 59	3 1	15 33	
14	22 Sun. af. Trin.	7 35	4 25	18 9 25	43 8 11	3 56	15 25	
15	Machutus	7 36	4 24	18 24 22	33 9 25	4 47	15 15	
16		7 38	4 22	18 30 18	29 10 40	5 34	15 5	
17	Hugh	7 39	4 21	18 54 13	44 11 51	6 18	14 53	
18		7 41	4 19	19 8 8	32 morn	6 59	14 41	
19		7 42	4 18	19 23 3	3 1 0	7 38	14 28	
20	Edmund	7 44	4 16	19 37 2 8	35 2 11	8 18	14 14	
21	23 Sun. af. Trin.	7 45	4 15	19 51 8	11 3 21	8 57	13 59	
22	Cecilia	7 46	4 14	20 4 13	35 4 33	9 38	13 44	
23	Clem: Old Mart.	7 48	4 12	20 17 18	33 5 49	10 23	13 27	
24		7 49	4 11	20 30 22	48 7 8	11 12	13 10	
25	Duke of Glo. b.	Cather.	4 10	20 42 26	0 D sets	0 a 5	12 52	
26		7 52	4 8	20 53 27	49 4 a 17	1 2	12 34	
27	Advent Sunday	7 53	4 7	21 5 28	1 5 15	2 1	12 14	
28		7 54	4 6	21 16 21	30 6 36	3 1	11 54	
29	[Mic. Term e.]	7 55	4 5	21 26 23	21 8 2	3 58	11 33	
30	St. Andrew	7 55	4 4	21 36 18	49 9 31	4 52	11 12	
M	Day	Length	Helioc.	Helioc.	Helioc.	Helioc.	Helioc.	H
D	decreaf.	of day	long. ♀	long. ♂	long. ♂	long. ☉	long. ♀	rises
1	7 0	9 34	12 53	20 21	5 11 41	8 8 22	2 4 45	2m 17
7	7 20	9 14	13 5	20 40	8 49	14 24	12 18	5 8 5
13	7 40	8 54	13 18	21 16	11 55	20 26	21 52	11 11 50
19	7 58	8 36	13 30	21 43	15 0	26 29	1 8 27	19 25 11
25	8 14	8 20	13 43	22 11	18 2	2 11 33	11 3	22 2 36

M	Daylig. D begins	Daylig. ends	Durat. twilig.	Pl. (C's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	5 17	6 43	1 56	8X27	1 n 50	1 n 0	1 n 5	4 s 1	2 s 10
7	5 26	6 34	1 58	8 8	1 51	1 7	1 20	4 3	0 38
13	5 33	6 28	2 0	7 45	1 52	1 8	1 36	3 58	1 n 19
19	5 41	6 19	2 2	7 30	1 54	1 9	1 53	3 44	2 22
25	5 47	6 13	2 4	7 11	1 55	1 10	2 11	3 19	2 25

M	☉'s longitude		☾'s long.		☾'s latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
D	m 8	22 17	18 32	3 s 56	17 35	27 15	11 15	13 24	4 47	24 17
2	9	22 26	2 17	3 16	17 41	27 20	11 23	25 41	23 49	
3	10	22 36	16 14	2 2	17 47	27 37	11 32	26 55	23 7	
4	11	22 48	0X21	0 50	17 52	27 48	11 41	27 28	22 10	
5	12	23 1	14 42	0 n 27	17 58	27 59	11 49	28 20	21 5	
6	13	23 16	29 9	1 44	18 4	28 10	11 57	29 12	19 57	
C	14	23 32	13 42	2 51	18 9	28 21	12 4	30 3	18 46	
8	15	23 50	28 14	3 48	18 14	28 32	12 10	0 53	17 31	
9	16	24 9	12 39	4 31	18 19	28 42	12 15	1 4	16 12	
10	17	24 30	26 50	4 56	18 24	28 53	12 19	2 32	14 49	
11	18	24 53	10 14	5 2	18 29	29 3	12 23	3 20	13 31	
12	19	25 17	24 13	4 52	18 34	29 14	12 26	4 7	12 22	
13	20	25 44	7 50	4 26	18 39	29 23	12 28	4 53	11 22	
C	21	26 12	20 1	3 47	18 44	29 34	12 29	5 38	10 31	
15	22	26 42	2 23	2 59	18 48	29 44	12 R 30	6 22	9 50	
16	23	27 15	14 28	2 4	18 53	29 54	12 29	7 5	9 20	
17	24	27 49	26 22	1 4	18 57	30 4	12 28	7 47	9 2	
18	25	28 24	8 20	0 1	19 2	30 13	12 26	8 29	8 D 56	
19	26	29 2	19 57	1 s 1	19 6	30 23	12 23	9 10	9 1	
20	27	29 42	1 50	2 1	19 10	30 32	12 19	9 50	9 11	
C	28	30 23	13 53	2 56	19 14	30 42	12 14	10 28	9 35	
22	29	31 6	26 9	3 44	19 18	30 51	12 9	11 4	10 13	
23	30	31 51	8 41	4 23	19 22	31 1	12 3	11 39	10 58	
24	1	32 37	21 37	4 18	19 26	31 10	11 56	12 12	11 46	
25	2	33 24	4 38	5 0	19 30	31 19	11 48	12 44	12 37	
26	3	34 13	18 0	4 55	19 34	31 28	11 40	13 15	13 35	
27	4	35 3	1 35	4 34	19 37	31 37	11 30	13 44	14 39	
C	5	35 54	15 21	3 56	19 41	31 46	11 19	14 12	15 48	
29	6	36 46	29 13	3 5	19 44	31 55	11 7	14 38	17 0	
30	7	37 38	13 10	2 1	19 48	32 4	10 54	15 2	18 14	

M	☿ rises	♂ rises	♀ sets	♂ sets	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	3 m 14	8 a 2	6 a 35	5 a 9	6 n 35	2 n 7	24 n 4	27 s 22	21 s 4
7	2 57	7 36	6 33	4 44	6 24	1 41	24 15	27 31	18 2
13	2 39	7 10	6 31	rises	6 13	1 17	24 29	27 20	14 0
19	2 20	6 44	6 29	5 m 54	6 4	0 54	24 46	26 52	12 16
25	2 0	6 18	6 26	5 48	5 56	0 33	25 7	26 10	13 20

The LUNATIONS.

First quarter the 2d day, at 4 minutes past 9 morning.

Full Moon the 9th day, at 40 minutes past 7 morning.

Last quarter the 17th day, at 33 minutes past 5 morning.

New Moon the 24th day, at 40 minutes past 9 night.

First quarter the 31st day, at 3 minutes past 5 evening.

M	Sundays & other D. remark. days	☉ rises	☉ sets	☉'s declin.	☽'s declin.	☽ rises & sets	☽ South	Clock aft. ☉	
1		7 57	4 3	21 s 46	13 s 15	10 a 57	5 a 42	10' 50"	
2		7 58	4 2	21 55	6 59	morn	6 31	10 27	
3		7 59	4 1	22 4	0 22	0 21	7 18	10 3	
4		8 0	4 0	22 13	6 n 16	1 43	8 5	9 39	
5	2 Sun. in Adve.	8 1	3 59	22 21	12 35	3 8	8 55	9 15	
6	Nicholas	8 2	3 58	22 28	18 14	4 36	9 47	8 50	
7		8 3	3 57	22 36	22 52	6 3	10 42	8 24	
8	Concept. V.M.	8 3	3 57	22 42	26 9	7 26	11 39	7 58	
9		8 4	3 56	22 48	27 53	☽ rises	morn	7 32	
10		8 4	3 56	22 54	27 56	4 a 30	0 37	7 5	
11		8 5	3 55	23 0	26 26	5 40	1 34	6 37	
12	3 Su. in Advent	8 6	3 54	23 5	23 37	6 56	2 27	6 9	
13	Lucy	8 6	3 54	23 9	19 46	8 10	3 16	5 41	
14		8 6	3 54	23 13	15 10	9 25	4 1	5 13	
15	Ember Week	8 7	3 53	23 16	10 4	10 35	4 44	4 44	
16	Cam. Ter. O. Sa.	8 7	3 53	23 20	4 39	11 44	5 23	4 15	
17	Oxf. Term ends	8 7	3 53	23 22	0 s 55	morn	6 2	3 45	
18		8 8	3 52	23 24	6 30	0 54	6 41	3 16	
19	4 Su. in Advent	8 8	3 52	23 26	11 55	2 4	7 21	2 46	
20		8 8	3 52	23 27	16 59	3 17	8 3	2 16	
21	St. Thomas	Shor. d.	3 52	23 28	21 28	4 34	8 50	1 46	
22		8 8	3 52	23 28	25 2	5 53	9 41	1 16	
23		8 8	3 52	23 28	27 22	7 12	10 37	0 46	
24		8 8	3 52	23 27	28 6	☽ sets	11 36	0 15	
25	Christmas Day	8 7	3 53	23 26	27 5	3 a 56	0 a 37	ob. 15	
26	1 Sun. af. Chri.	8 7	3 53	23 24	24 18	5 30	1 36	0 45	
27	St. John [St. Ste.]	8 7	3 53	23 22	19 58	7 1	2 33	1 15	
28	Innocents	8 6	3 54	23 19	14 29	8 30	3 26	1 45	
29		8 6	3 54	23 16	8 12	9 57	4 16	2 14	
30		8 6	3 54	23 13	1 34	11 22	5 3	2 44	
31	Silvester	8 5	3 55	23 9	5 n 5	morn	5 50	3 13	
M	Day	Length	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ♀	Helioc. long. ♂	Helioc. long. ♀	Helioc. long. ♂	h rites
1	8 28	8 6	13 11 55	22 17 38	21 11 3	8 11 39	20 8 40	20 11 27	cm 26
7	8 40	7 54	14 8	23 0	24 2	14 44	0 11 18	13 32	0 1
13	8 46	7 48	14 20	23 33	27 0	20 50	9 58	3 11 20	11 a 35
19	8 50	7 44	14 33	24 0	29 5	26 57	19 38	21 8	11 8
25	9 0	7 46	14 45	24 28	32 50	32 4	29 20	7 4 53	10 40

M D	Daylig. begins	Daylig. ends	Durat. twilig.	Pl. Q's node	h's latitude	u's latitude	δ's latitude	♀'s latitude	♂'s latitude
1	5 54	6 6	2 5	6X52	1 n 57	1 n 12	2 n 29	2 s 42	1 n 56
7	5 57	6 3	2 6	6 33	1 58	1 13	2 46	1 50	1 15
13	5 59	6 1	2 7	6 14	2 0	1 14	3 1	0 41	0 33
19	6 1	5 59	2 7	5 55	2 1	1 16	3 15	0 n 43	0 s 12
25	6 1	5 59	2 7	5 36	2 3	1 17	3 25	2 16	0 52

M D	O's longitude		Q's long.	Q's latitude	h's long.	u's long.	δ's long.	♀'s long.	♂'s long.
1	8	38 32	27 11	0 s 51	19 51	2 12	10 40	15 23	19 13
2	9	39 27	11 15	0 n 24	19 54	2 20	10 26	15 4	20 49
3	10	40 22	25 21	1 37	19 57	2 28	10 11	16 2	22 10
4	11	41 18	9 28	2 43	20 0	2 36	9 56	16 18	23 34
C	12	42 14	23 36	3 41	20 3	2 44	9 40	16 38	24 58
6	13	43 12	7 40	4 24	20 6	2 52	9 23	16 44	26 23
7	14	44 10	21 39	4 51	20 9	3 0	9 5	16 54	27 49
8	15	45 8	5 12	5 12	20 12	3 7	8 47	17 0	29 16
9	16	46 8	19 1	4 53	20 14	3 14	8 23	17 4	0 44
10	17	47 9	2 17	4 29	20 17	3 21	8 9	17 R	4 2 12
11	18	48 10	15 15	3 52	20 19	3 28	7 49	17 4	3 41
C	19	49 12	27 53	3 5	20 21	3 35	7 28	17 4	5 10
13	20	50 15	10 13	2 9	20 23	3 42	7 6	17 4	6 40
14	21	51 19	22 18	1 8	20 25	3 48	6 43	17 2	8 10
15	22	52 25	4 12	0 6	20 27	3 55	6 21	16 56	9 41
16	23	53 30	16 1	0 s 57	20 29	4 1	5 58	16 42	11 12
17	24	54 37	27 49	1 57	20 30	4 8	5 36	16 27	12 43
18	25	55 45	9 42	2 53	20 32	4 14	5 13	16 7	14 14
C	26	56 54	21 46	3 41	20 33	4 20	4 50	15 44	15 46
20	27	58 3	4 6	4 21	20 34	4 25	4 26	15 20	17 18
21	28	59 13	16 45	4 49	20 35	4 31	4 3	14 55	18 50
22	0	0 24	29 45	5 2	20 36	4 36	3 39	14 29	20 23
23	1	1 36	13 8	5 0	20 37	4 42	3 15	14 2	21 56
24	2	2 47	26 51	4 41	20 38	4 47	2 51	13 34	23 29
25	3	3 59	10 51	4 5	20 39	4 52	2 27	13 4	25 2
C	4	5 12	25 4	3 12	20 39	4 56	2 4	12 32	26 36
27	5	6 24	9 24	2 8	20 39	5 1	1 41	11 58	28 10
28	6	7 36	23 46	0 55	20 40	5 5	1 18	11 22	29 44
29	7	8 48	8 5	0 n 22	20 40	5 10	0 55	10 46	1 18
30	8	10 0	22 19	1 37	20 40	5 14	0 32	10 10	2 52
31	9	11 12	6 27	2 45	20 41	5 18	0 5	9 33	4 27
M D	u rises	δ rises	♀ sets	♂ rises	h's declin.	u's declin.	δ's declin.	♀'s declin.	♂'s declin.
1	Im 38	5 a 48	6 a 18	6 m 2	5 n 49	0 n 13	25 n 31	25 s 15	15 s 46
7	1 17	5 17	6 6	6 25	5 43	0 s 5	25 55	24 1	18 28
13	0 55	4 42	5 49	6 50	5 3	0 20	26 18	23 3	20 57
19	0 32	4 3	5 24	7 15	5 37	0 34	26 37	21 50	22 55
25	0 7	3 17	4 54	7 39	5 36	0 45	26 52	20 34	24 14

Dates		Heliocentric		Geocentric		Declin.		South.	
Months	Days	Longitude	Latitude	Longitude	Latitude			h	m
January	1	3 53	0 43	7 3	0 43	2 8	17	38	
	11	4 6	0 43	7 6	0 44	2 9	16	55	
	21	4 13	0 43	7 4	0 44	2 8	16	12	
February	1	4 22	0 43	6 54	0 44	2 4	15	26	
	11	4 30	0 43	6 43	0 45	1 58	14	45	
	21	4 38	0 43	6 23	0 45	1 51	14	5	
March	1	4 44	0 43	6 6	0 45	1 44	13	34	
	11	4 52	0 43	5 42	0 45	1 34	12	56	
	21	5 0	0 43	5 16	0 45	1 24	12	18	
April	1	5 8	0 43	4 48	0 45	1 13	11	36	
	11	5 16	0 43	4 22	0 45	1 3	10	58	
	21	5 24	0 43	3 58	0 45	0 54	10	20	
May	1	5 32	0 44	3 38	0 45	0 46	9	41	
	11	5 39	0 43	3 20	0 44	0 39	9	2	
	21	5 47	0 43	3 8	0 44	0 34	8	21	
June	1	5 56	0 43	2 59	0 44	0 31	7	37	
	11	6 4	0 43	2 57	0 43	0 31	6	55	
	21	6 11	0 43	3 0	0 43	0 32	6	14	
July	1	6 19	0 42	3 8	0 42	0 36	5	33	
	11	6 27	0 42	3 22	0 42	0 42	4	53	
	21	6 35	0 42	3 40	0 41	0 45	4	14	
August	1	6 44	0 42	4 5	0 41	1 0	3	32	
	11	6 51	0 42	4 32	0 41	1 11	2	55	
	21	6 59	0 42	5 3	0 40	1 23	2	20	
September	1	7 8	0 42	5 40	0 40	1 38	1	42	
	11	7 16	0 42	6 16	0 40	1 53	1	8	
	21	7 23	0 42	6 53	0 40	2 8	0	35	
October	1	7 31	0 4	7 31	0 40	2 23	0	1	
	11	7 39	0 42	8 9	0 40	2 38	23	23	
	21	7 47	0 4	8 47	0 40	2 52	22	48	
November	1	7 55	0 40	9 26	0 40	3 8	22	8	
	11	8 3	0 42	9 5	0 40	3 21	21	30	
	21	8 11	0 42	10 30	0 40	3 32	20	51	
December	1	8 19	0 42	10 56	0 41	3 43	20	10	
	11	8 27	0 42	10 19	0 41	3 51	19	28	
	21	8 34	0 42	10 36	0 41	3 58	18	45	
	31	8 42	0 4	10 4	0 42	4 2	18	1	

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	JANUARY				FEBRUARY				MARCH				APRIL				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	11	6			0	33	1	7	11	44			0	59	1	25	1
2			0	21	1	41	2	13	0	7	0	50	1	50	2	15	2
3	0	55	1	30	2	38	3	1	1	20	1	48	2	36	2	57	3
4	2	3	2	36	3	19	3	35	2	13	2	37	3	14	3	31	4
5	3	c	3	22	3	51	4	6	2	56	3	15	3	47	4	3	5
6	3	41	3	59	4	25	4	43	3	31	3	47	4	23	4	44	6
7	4	18	4	38	5	1	5	20	4	3	4	19	5	6	5	27	7
8	4	57	5	15	5	41	6	4	4	38	4	59	5	54	6	21	8
9	5	35	5	57	6	29	6	56	5	19	5	41	6	49	7	17	9
10	6	21	6	45	7	25	7	56	6	7	6	34	7	47	8	18	10
11	7	10	7	35	8	29	9	4	7	4	7	35	8	49	9	20	11
12	8	4	8	34	9	34	10	14	8	8	8	41	9	49	10	18	12
13	9	6	9	38	10	47	11	20	9	15	9	50	10	45	11	11	13
14	10	12	10	46	11	51			10	21	10	52	11	37			14
15	11	9	11	52	0	21	0	47	11	22	11	51	0	3	0	25	15
16			0	22	1	11	0	44			0	16	0	47	1	9	16
17	0	50	1	17	1	57	2	12	0	40	1	2	1	31	1	53	17
18	1	43	2	7	2	38	3	8	1	23	1	45	2	16	2	35	18
19	2	32	2	49	3	7	3	21	2	5	2	2	2	55	3	12	19
20	3	6	3	20	3	33	3	46	2	43	2	59	3	20	3	46	20
21	3	34	3	47	3	58	4	13	3	12	3	27	4	3	4	25	21
22	4	0	4	14	4	28	4	44	3	41	3	57	4	47	5	1	22
23	4	28	4	43	5	3	5	22	4	9	4	29	5	36	6	6	23
24	4	59	5	14	5	42	6	7	4	50	5	12	6	37	6	59	24
25	5	30	5	50	6	35	7	6	5	35	6	4	7	41	8	15	25
26	6	11	6	35	7	39	8	17	6	33	7	7	8	51	9	26	26
27	7	0	7	29	8	57	9	39	7	41	8	20	10	2	10	34	27
28	7	58	8	33	10	22	11	3	9	0	9	30	11	5	11	36	28
29	9	11	9	51					10	18	10	54		0		6	29
30	10	33	11	15					11	29			0	33		59	30
31	11	57							0	1	0	31					31

This Table may serve the following Places, by adding

	h	m
For Tinmouth Haven, Hartle-pool, and Amsterdam	0	30
Brest — — — — —	1	0
Scilly — — — — —	1	45
Mount's Bay — — — — —	1	55
Bridlington Pier and Humber — — — — —	2	0

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

M. Days	MAY				JUNE				JULY				AUGUST				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	1	24	1	49	2	43	3	4	3	5	3	22	3	40	3	52	1
2	2	14	2	40	3	23	3	41	3	37	3	51	4	4	4	17	2
3	3	0	3	18	3	58	4	14	4	6	4	20	4	32	4	47	3
4	3	36	3	53	4	32	4	51	4	36	4	52	5	2	5	18	4
5	4	12	4	32	5	9	5	27	5	7	5	22	5	37	5	57	5
6	4	52	5	14	5	47	6	8	5	40	5	58	6	20	6	45	6
7	5	36	6	0	6	29	6	51	6	19	6	40	7	12	7	41	7
8	6	24	6	50	7	10	7	29	7	1	7	23	8	16	8	53	8
9	7	15	7	41	7	57	8	25	7	51	8	19	9	33	10	14	9
10	8	7	8	34	8	51	9	18	8	51	9	24	10	54	11	35	10
11	9	1	9	28	9	47	10	16	9	59	10	35	0	12			11
12	9	55	10	21	10	45	11	15	11	13	11	51	0	48	1	20	12
13	10	47	11	12	11	47				0	27		1	50	2	18	13
14	11	37			0	20	0	51	1	2	1	35	2	45	3	4	14
15	0	1	0	28	1	22	1	53	2	8	2	35	3	23	3	39	15
16	0	56	1	22	2	25	2	50	3	0	3	20	3	54	4	12	16
17	1	47	2	13	3	12	3	34	3	38	3	55	4	29	4	48	17
18	2	40	3	2	3	53	4	14	4	12	4	33	5	7	5	28	18
19	3	21	3	42	4	34	4	55	4	55	5	13	5	51	6	18	19
20	4	0	4	21	5	15	5	38	5	30	5	52	6	46	7	16	20
21	4	45	5	9	6	1	6	26	6	15	6	41	7	47	8	22	21
22	5	31	6	0	6	51	7	17	7	7	7	36	8	58	9	34	22
23	6	28	6	55	7	44	8	13	8	6	8	40	10	11	10	45	23
24	7	23	7	53	8	42	9	15	9	15	9	51	11	18	11	49	24
25	8	25	8	56	9	40	10	22	10	27	11	1			0	19	25
26	9	27	9	58	10	53	11	27	11	35			0	39	1	8	26
27	10	26	11	0			0	1	0	7	0	39	1	31	1	53	27
28	11	31			0	31	1	0	1	7	1	33	2	14	2	34	28
29			0	28	1	29	2	57	1	58	2	22	2	49	3	3	29
30	0	56	1	24	2	22	2	47	2	41	2	59	3	16	3	29	30
31	1	53	2	22					3	13	3	27	3	42	3	56	31

	Adding				h	m
For Fowey, Loo and Plymouth	—	—	—	—	3	10
Dartmouth, Harbrough and Hull	—	—	—	—	3	30
Terbay and Tinnmouth	—	—	—	—	3	40
Exmouth, Topsham and Lime	—	—	—	—	3	50
Bristol and Weymouth	—	—	—	—	4	20
Bridgewater and Texel	—	—	—	—	4	40
Portland and Hartlew	—	—	—	—		50

Time of High-Water at LONDON in the morning and afternoon of every day in the year.

Mo. Days	SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER				Mo. Days
	morn.		aftern.		morn.		aftern.		morn.		aftern.		morn.		aftern.		
	h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m	
1	4	9	4	22	4	25	4	45	5	55	6	24	6	29	6	56	1
2	4	39	4	56	5	7	5	28	6	53	7	23	7	23	7	51	2
3	5	15	5	35	5	55	6	25	7	55	8	29	8	21	8	51	3
4	6	1	6	27	6	57	7	29	9	2	9	36	9	23	9	56	4
5	6	57	7	29	8	5	8	44	10	8	10	40	10	28	10	59	5
6	8	5	8	44	9	22	10	1	11	12	11	44	11	32			6
7	9	24	10	7	10	35	11	9			0	13	0	6	0	36	7
8	10	47	11	26	11	42			0	41	1	8	1	5	1	35	8
9			0	1	0	15	0	44	1	35	2	3	2	4	2	30	9
10	0	34	1	4	1	11	1	37	2	31	2	57	2	54	3	14	10
11	1	33	2	0	2	3	2	27	3	13	3	32	3	32	3	49	11
12	2	26	2	47	2	50	3	10	3	50	4	10	4	5	4	24	12
13	3	6	3	24	3	27	3	45	4	31	4	51	4	43	5	0	13
14	3	40	3	50	4	2	4	23	5	13	5	35	5	17	5	36	14
15	4	12	4	32	4	44	5	7	5	58	6	22	5	55	6	15	15
16	4	55	5	17	5	30	5	57	6	47	7	11	6	35	6	56	16
17	5	39	6	6	6	25	6	53	7	35	8	1	7	17	7	40	17
18	6	36	7	6	7	21	7	51	8	28	8	53	8	4	8	29	18
19	7	38	8	13	8	22	8	52	9	18	9	45	8	55	9	22	19
20	8	51	9	23	9	21	9	50	10	12	10	37	9	52	10	22	20
21	9	55	10	26	10	18	10	44	11	2	11	28	10	53	11	25	21
22	10	56	11	25	11	9	11	35	11	54			11	58			22
23	11	52			11	59			0	22	0	50	0	29	1	0	23
24	0	17	0	39	0	22	0	44	1	14	1	36	1	30	2	1	24
25	1	0	1	22	1	6	1	27	2	3	2	30	2	28	2	54	25
26	1	42	2	2	1	49	2	11	2	51	3	12	3	14	3	34	26
27	2	21	2	40	2	31	2	51	3	31	3	59	3	52	4	9	27
28	2	55	3	9	3	9	3	25	4	10	4	31	4	3	4	59	28
29	3	24	3	38	3	42	3	59	4	53	5	15	5	10	5	29	29
30	3	52	4	6	4	20	4	41	5	39	6	3	5	51	6	14	30
31					5	3	5	26					6	20	7	4	31

Subtracting

h m

For Leigh, Maes, and Gouries Gut	—	—	—	—	0	5
Gravesend, Rochester, and Rammekins	—	—	—	—	1	20
Buoy of the Nore and Flushing	—	—	—	—	1	30
Portsmouth, Ostend, Shoe-Beacon, and Red-Sand	—	—	—	—	2	0
Harwich, Dover, Spithead, and Calais	—	—	—	—	3	0
Gunfleet, Haffings, Shoreham, Orfordness, and Dieppe	—	—	—	—	4	0
Yarmouth Pier and Needle	—	—	—	—	4	40
St. Helen's and Havre-de-Grace	—	—	—	—	5	30

The Eclipses of Jupiter's

JANUARY	FEBRUARY	MARCH	APRIL
Immersion.	Immersion	Emergions	Emergions
d h m s	d h m s	d h m s	d h m s
2*14 1 14	1*16 3 57	2 1 54 16	1 3 59 41
4 8 29 38	3*10 32 21	3 20 22 44	2 22 28 18
6 2 57 58	5 5 0 49	5*14 51 18	4 16 56 53
7 21 26 22	6 23 29 14	7* 9 19 47	6*11 25 32
9*15 54 43	8*17 57 43	9 3 48 21	8 5 54 7
11*10 23 7	10*12 26 8	10 22 16 50	10 0 22 46
13 4 51 28	12* 6 54 38	12*16 45 25	11 18 51 22
14 23 19 53	14 1 23 4	14*11 13 50	13*13 20 1
16*17 48 14	15 19 51 35	16 5 42 31	15* 7 48 38
18*12 16 39	17*14 20 3	18 0 11 2	17 2 17 16
20 6 45 1	19* 8 48 34	19 18 39 38	18 20 45 54
22 1 13 28	Emergions	21*13 8 10	20 15 14 33
23 19 41 50	21 5 31 47	23* 7 36 46	22* 9 43 11
25*14 10 16	23 0 0 18	25 2 5 19	24 4 11 50
27* 8 38 39	24 18 28 45	26 20 33 56	25 22 40 28
29 3 7 6	26*12 57 16	28*15 2 30	27 17 9 7
30 21 35 30	28* 7 25 44	30* 9 31 7	29*11 37 47
MAY	JUNE	JULY	AUGUST
Emergions	Emergions	Emergions	Emergions
d h m s	d h m s	d h m s	d h m s
1 6 6 26	2 2 42 22	2 4 49 37	1 6 56 18
3 0 35 5	3 21 11 4	3 23 18 14	3 1 24 56
4 19 3 45	5 15 39 42	5 17 46 55	4 19 53 30
6 13 32 24	7*10 8 24	7 12 15 31	6 14 22 8
8 8 1 4	9 4 37 2	9 6 44 12	8 8 50 42
10 2 29 44	10 23 5 44	11 1 12 48	10 3 19 20
11 20 58 23	12 17 34 22	12 19 41 28	
13 15 27 3	14 12 3 3	14 14 10 5	
15* 9 55 42	16 6 31 42	16 8 38 45	
17 4 24 22	18 1 0 23	18 3 7 21	
18 22 53 2	19 19 29 2	19 21 36 1	
20 17 21 43	21 13 57 42	21 16 4 37	
22*11 50 22	23 8 26 20	23 10 33 16	
24 6 19 4	25 2 55 1	25 5 1 51	
26 0 47 42	26 21 23 38	26 23 30 30	
27 19 16 24	28 15 52 19	28 17 59 4	
29 13 45 3	30 10 20 56	30 12 27 43	
31 8 13 44			

first Satellite for the Year 1802.

SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	Immersion	Immersion	Immersion
	d h m s	d h m s	d h m s
The eclipses of Jupiter's Satellites are not visible this Month, Jupi- ter being too near the Sun.	9 5 16 1	1 5 25 54	1 7 28 55
	10 23 44 26	2 23 54 24	3 1 57 14
	12 18 12 56	4 18 22 45	4 20 25 42
	14 12 41 23	6 12 51 15	6* 14 54 0
	16 7 9 54	8 7 19 36	8 9 22 28
	18 1 38 18	10 1 48 6	10 3 50 45
	19 20 6 49	11 20 16 27	11 22 19 13
	21 14 35 14	13 14 44 56	13* 16 47 30
	23 9 3 44	15 9 13 16	15 11 15 57
	25 3 32 8	17 3 41 45	17 5 44 14
	26 22 0 39	18 22 10 5	19 0 12 41
	28* 16 29 2	20* 16 38 33	20* 18 40 59
	30 10 57 31	22 11 6 53	22* 13 9 25
		24 5 35 22	24 7 37 44
		26 0 3 41	26 2 6 11
		27* 18 32 9	27 20 34 27
		29 13 0 27	29* 15 2 53
			31 9 31 11

The Times of the Eclipses contained in this Table are adapted to the Meridian of the Royal Observatory at Greenwich, and afford an excellent Method to discover the Longitude, or Difference of Meridians, between that and any other Place; which I shall illustrate by an EXAMPLE:

Suppose on the 16th Day of October of this Year, the Time of the Immersion of Jupiter's first Satellite be observed (by a Telescope) in an unknown Meridian, to happen at 8 h. 58 min. 14 sec.; I find by the Table, that the Time of this Immersion will happen at the British Observatory, at 7 h. 9 min. 54 sec. the same day: The Difference of the Times is 1 hour 48 min. 20 sec. which being converted into Degrees and Minutes of the Equator, will make 27 deg. 5 min. the Longitude of the Place of Observation, to the East, because the Time is more than that at the British Observatory.

N. B Those marked with an Asterisk are visible at Greenwich.

Note, also, that the times of the above eclipses are set down according to mean or clock time.

Speculum Phænomenorum

JANUARY

2	♂ ☾ ♂ 7h.
2	♂ ☾ ♀ 13h.
2	♂ ☾ ♀ 20h.
5	☾ in perige
9	♀ in aphelion
11	♀ in ☿
13	♂ stationary
20	☉ in ♄ 4h. 27m.
20	☾ in apoge
21	♂ ☾ ♀ 11h.
21	♂ ☾ ♀ 15h.
24	♂ ☾ ☿ 4h.
27	♂ ☾ ☿ 10½h.
31	♂ ☾ ♀ 4 h.

FEBRUARY

1	♂ ☾ ♀ 12h.
2	♂ ☾ ♀ 14h.
2	☾ in perige
15	☾ in apoge
16	♀ in aphelion
17	♂ ☾ ♀ 11h.
17	♂ ☾ ♀ 17½h.
18	☉ in ♄ 19h. 14m.
18	☾ in ☿
19	☾ ☉ ♀ 15½h.
20	☾ ☾ ☿ 10h.
21	☾ ☾ ☿ 20h.
22	☾ in perihelion
24	☾ elong. max.

MARCH

1	♂ ☾ ♂ 1h.
2	☿ stationary
2	☾ in perige
3	☉ eclipsed invis.
3	♂ ☾ ♀ 11h.
4	♂ ☾ ☿ 15h.
12	♂ ☉ ♀ 8½h.
15	☾ in apoge
16	♂ ☾ ♀ 10h.
16	♂ ☾ ♀ 20h.
17	♂ ☉ ♀ 11½h.
18	☾ eclips. invis.
19	♂ ☾ ☿ 14h.
20	☉ in ♀ 19h. 35m.
25	☾ ☉ ☿ 22½h.
26	☿ stationary
28	☿ in ☿
29	♂ ☾ ♂ 22½h.
30	☾ in perige
31	♂ ☾ ♀ 6h.

APRIL

2	♂ ☾ ♀ 10½h.
7	☿ in aphelion
9	☿ elong. max.
11	☾ in apoge
12	♂ ☾ ♀ 14h.
13	♂ ☾ ♀ 10h.
15	♂ ☾ ☿ 19h.
20	☉ in ☿ 8h. 15m.
22	♂ stationary
27	♂ ☾ ♂ 19h.
27	☾ in perige
30	♂ ☾ ♀ 2h.

MAY

2	♂ ☾ ♀ 12h.
3	♂ stationary
5	♀ in ☿
9	☾ in apoge
10	♂ ☾ ♀ 11h.
10	♂ ☾ ♀ 7½h.
13	♂ ☾ ☿ 7h.
17	☿ in ☿
18	☾ ☉ ♀ 11h.
18	♂ ☉ ♀ 18½h.
21	☉ in ♄ 8h. 47m.
22	☾ ☉ ♀ 8h.
22	☾ in perige
22	☿ in perihelion
26	♂ ☾ ♂ 14h.
28	♂ in perihelion

JUNE

1	♂ ☾ ☿ 8h.
1	♂ ☾ ♀ 17h.
6	♂ ☾ ♀ 12h.
6	♂ ☾ ♀ 17½h.
6	☾ in apoge
9	♂ ☾ ☿ 9h.
9	♂ stationary
9	♀ in perihelion
18	☾ in perige
21	☿ elong. max.
21	☉ in ☿ 17h. 27m.
24	♂ ☾ ♂ 9h.
24	☾ ☉ ☿ 22h.
24	☿ in ☿

ad Annum 1802.

JULY

1	♂ ☾ ♀ 12h.
1	☉ in aphelion
2	♂ ☾ ♀ 0h.
4	♂ ☾ ♀ 5h.
4	♂ ☾ ♀ 4h.
4	☾ in apoge
4	♂ in aphelion
5	♂ stationary
6	♂ ☾ ☿ 17½h.
16	☾ in perige
18	♂ ☾ ☿ 20½h.
23	♂ ☾ ☿ 2h.
23	☉ in ♄ 4h. 17m.
27	♂ ☾ ♀ 22h.
29	♂ stationary
31	♂ ☾ ♀ 17½h.
31	♂ ☾ ♀ 20½h.
31	☾ in apoge

AUGUST

1	♂ ☾ ♀ 8h.
3	♂ ☾ ☿ 1½h.
7	♂ elong. max.
12	♂ in ☿
13	☾ in perige
17	♂ in perihelion
20	♂ ☾ ☿ 18h.
23	☉ in ♃ 10h. 39m.
24	♀ in ☿
27	♂ ☾ ♀ 8h.
27	☉ eclipsed visible
27	☾ in apoge
28	♂ ☾ ♀ 6½h.
28	♂ ☾ ♀ 14½h.
30	♂ ☾ ☿ 9½h.
31	♂ ☾ ♀ 14h.

SEPTEMBER

1	♂ ☉ ♀ 8h.
3	♂ ☉ ♀ 15½h.
9	♂ ☉ ♀ 7½h.
11	☾ eclipsed visible
11	☾ in perige
18	♂ ☾ ♀ 8h.
18	☐ ☉ ☿ 11½h.
20	♂ ☉ ☿ 22½h.
20	♂ in ☿
23	☉ in ♃ 7h. 8m.
24	♂ ☾ ♀ 20h.
24	☾ in apoge
25	♂ ☾ ♀ 9h.
26	♂ ☾ ☿ 19h.
28	♂ ☾ ♀ 5h.
28	♂ in ☿
29	♀ in aphelion
30	♂ ☾ ♀ 13h.

OCTOBER

1	♂ in aphelion
9	☾ in perige
16	♂ ☾ ♀ 14h.
17	♂ elong. max.
20	♀ elong. max.
21	☾ in apoge
22	♂ ☾ ♀ 9½h.
23	♂ ☾ ♀ 3½h.
23	☉ in ♃ 15h. 8m.
24	♂ ☾ ☿ 5h.
27	♂ ☾ ♀ 23h.
29	♂ stationary
30	♂ ☾ ♀ 2½h.

NOVEMBER

8	♂ ☉ ♀ 21½h.
8	♂ in ☿
13	♂ in perihelion
13	♂ ☾ ☿ 10h.
15	♂ stationary
18	♂ stationary
19	♂ ☾ ♀ 0h.
19	♂ ☾ ♀ 21h.
20	♂ ☾ ☿ 16½h.
22	☉ in ♄ 11h. 25m.
23	♂ ☾ ♀ 4h.
25	♂ elong. max.
27	♂ ☾ ♀ 21½h.

DECEMBER

10	♂ ☾ ♀ 11h.
10	♀ stationary
12	☐ ☉ ♀ 13h.
16	♀ in ☿
16	♂ ☾ ♀ 9h.
17	♂ ☾ ♀ 13h.
17	♂ in ☿
18	♂ ☾ ☿ 3½h.
21	☉ in ♃ 23h. 51m.
23	♂ ☾ ♀ 16h.
24	♂ ☉ ☿ 13½h.
25	♂ ☾ ♀ 4h.
26	☐ ☉ ♀ 21½h.
26	♂ in aphelion
31	♂ stationary
31	☉ in perihelion

A Table of the Sun's semi-diurnal Arches, or Times

The SUN'S Declination North.

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

By these Tables the Times of the Sun's Rising and Setting may be found, in any Part of the Kingdom of *Great-Britain* or *Ireland*, after the following Manner: Where the Latitude of the Place is known, take the Sun's Declination out of the Table, on the Noon of the Day you desire to know the Time of his Rising and Setting; and with it, according as it is either North or South, enter these Tables in the Left-

of his visible half Duration above the Horizon.

The Sun's Declination South.

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

Left-hand Column, under the Word Degrees; then look for the Latitude of the Place in the Top of the Table; and in that Column, against the Sun's Declination, will be found the Time of his visible half Duration above the Horizon, or Time of his Setting, correct by Refraction; then subtract the Time of his Setting from 12 Hours, the Remainder will be the Time of his Rising; double the Time of his Setting, the

A Table of the Sun's semi-diurnal Arches, or Times

The Sun's Declination North.

Degr.	Lat. 55		Lat. 56		Lat. 57		Lat. 58		Lat. 59		Lat. 60	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	6	9	6	10	6	10	6	10	6	11	6	11
2	6	15	6	16	6	16	6	17	6	17	6	18
3	6	21	6	22	6	22	6	23	6	24	6	25
4	6	27	6	28	6	29	6	30	6	31	6	32
5	6	32	6	34	6	35	6	36	6	38	6	39
6	6	38	6	40	6	41	6	43	6	44	6	46
7	6	44	6	46	6	48	6	49	6	51	6	53
8	6	50	6	52	6	54	6	56	6	58	7	1
9	6	56	6	58	7	1	7	3	7	5	7	8
10	7	2	7	5	7	7	7	10	7	13	7	16
11	7	8	7	10	7	14	7	17	7	20	7	23
12	7	15	7	18	7	21	7	34	7	27	7	31
13	7	21	7	24	7	28	7	31	7	35	7	39
14	7	28	7	31	7	35	7	39	7	43	7	47
15	7	34	7	39	7	42	7	46	7	51	7	56
16	7	41	7	45	7	49	7	54	7	59	8	4
17	7	48	7	52	7	57	8	1	8	7	8	13
18	7	55	8	0	8	5	8	10	8	16	8	22
19	8	2	8	7	8	13	8	19	8	25	8	32
20	8	10	8	15	8	21	8	28	8	35	8	42
21	8	18	8	24	8	30	8	37	8	45	8	53
22	8	26	8	32	8	39	8	47	8	55	9	4
23	8	34	8	41	8	49	8	57	9	6	9	16
24	8	43	8	51	8	59	9	8	9	18	9	29

the Sum will be the Length of the Day ; and double the Time of his Rising, the Sum will be the Length of the Night. But if the Latitude of the Place, and Declination of the Sun, consist of Degrees and Minutes, then a small Allowance must be made for the Minutes in both Cases, which may be done by a Person of an ordinary Capacity by a mental Proportion only. Thus, to find the Time of the Sun's Rising and Setting

of his visible half Duration above the Horizon.

The Sun's Declination South.

Degr.	Lat. 55		Lat. 56		Lat. 57		Lat. 58		Lat. 59		Lat. 60	
	h	m	h	m	h	m	h	m	h	m	h	m
0	6	4	6	4	6	4	6	4	6	4	6	4
1	5	58	5	58	5	58	5	58	5	57	5	57
2	5	52	5	52	5	52	5	51	5	51	5	50
3	5	47	5	46	5	45	5	45	5	44	5	43
4	5	41	5	40	5	39	5	38	5	37	5	36
5	5	35	5	34	5	33	5	32	5	31	5	29
6	5	29	5	28	5	27	5	25	5	24	5	22
7	5	23	5	22	5	20	5	19	5	17	5	15
8	5	17	5	16	5	14	5	12	5	10	5	8
9	5	12	5	10	5	8	5	5	5	3	5	2
10	5	5	5	3	5	1	4	59	4	56	4	53
11	4	59	4	57	4	54	4	52	4	49	4	46
12	4	53	4	51	4	48	4	45	4	42	4	38
13	4	47	4	44	4	41	4	38	4	34	4	30
14	4	41	4	37	4	34	4	30	4	27	4	23
15	4	34	4	31	4	27	4	23	4	19	4	14
16	4	27	4	24	4	20	4	15	4	11	4	6
17	4	21	4	17	4	12	4	8	4	3	3	57
18	4	14	4	9	4	5	4	0	3	54	3	48
19	4	7	4	2	3	56	3	51	3	45	3	39
20	3	59	3	54	3	49	3	43	3	36	3	29
21	3	52	3	46	3	40	3	34	3	27	3	19
22	3	44	3	38	3	31	3	24	3	17	3	9
23	3	36	3	29	3	23	3	15	3	6	2	57
24	3	27	3	20	3	13	3	5	2	55	2	45

at Aberdeen in Scotland, on the Longest Day; the Latitude of that Place is accounted 57 Degr. 7 Min. North, and the Sun's Declination 23 Degr. 28 Min. likewise North. By these you will find by the Table, that 5 Min. for the Sun's Declination, and 1 Min. for the Latitude of the Place, are both, to be added to 8 Hours 49 Min. the Time belonging to 57 Degr. of Latitude and 23 Degr. of North Declination, and the Sum will be 8 Hours 55 Min. the Time of his apparent setting at Aberdeen, on the longest Day, whose Complement to 12 Hours, viz. 3 Hours 5 Min. will be the Time of his Rising, &c.

A Table of the Sun's Right-Ascension in Time, the greatest

Degr.	γ			δ			ι			ϖ			Ω			ιρ		
	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s
0	0	0	0	1	51	37	3	51	15	6	0	0	8	8	45	10	8	23
1	0	3	40	1	55	27	3	55	25	6	4	22	8	12	54	10	12	12
2	0	7	20	1	59	17	3	59	36	6	8	43	8	17	3	10	16	0
3	0	11	0	2	3	8	4	3	48	6	13	5	8	21	11	10	19	48
4	0	14	41	2	6	59	4	8	0	6	17	26	8	25	19	10	23	35
5	0	18	21	2	10	51	4	12	13	6	21	48	8	29	26	10	27	22
6	0	22	2	2	14	44	4	16	26	6	26	9	8	33	31	10	31	8
7	0	25	42	2	18	37	4	20	40	6	30	30	8	37	37	10	34	54
8	0	29	23	2	22	31	4	24	55	6	34	31	8	41	41	10	38	40
9	0	33	4	2	26	25	4	29	10	6	39	11	8	45	45	10	42	25
10	0	36	45	2	30	20	4	33	26	6	43	31	8	49	48	10	46	9
11	0	40	26	2	34	16	4	37	42	6	47	51	8	53	51	10	49	53
12	0	44	8	2	38	13	4	41	59	6	52	11	8	57	52	10	53	37
13	0	47	50	2	42	10	4	46	16	6	56	31	9	1	53	10	57	20
14	0	51	32	2	46	8	4	50	34	7	0	50	9	5	53	11	1	3
15	0	55	14	2	50	7	4	54	52	7	5	8	9	9	53	11	4	46
16	0	58	5	2	54	7	4	59	10	7	9	26	9	13	52	11	8	28
17	1	2	40	2	58	7	5	3	29	7	13	44	9	17	50	11	12	10
18	1	6	23	3	2	8	5	7	49	7	18	1	9	21	47	11	15	52
19	1	10	7	3	6	9	5	12	9	7	22	18	9	25	44	11	19	34
20	1	15	51	3	10	12	5	16	29	7	26	34	9	29	40	11	23	15
21	1	17	35	3	14	15	5	20	49	7	30	50	9	33	35	11	26	56
22	1	21	20	3	18	19	5	25	9	7	35	5	9	37	29	11	30	37
23	1	25	6	3	22	23	5	29	30	7	39	20	9	41	23	11	34	18
24	1	28	52	3	26	29	5	33	51	7	43	34	9	45	16	11	37	58
25	1	32	38	3	30	35	5	38	12	7	47	47	9	49	9	11	41	39
26	1	36	25	3	34	41	5	42	34	7	52	0	9	53	1	11	45	19
27	1	40	12	3	38	49	5	46	55	7	56	12	9	56	52	11	49	0
28	1	44	0	3	42	57	5	51	17	8	0	24	10	0	43	11	52	40
29	1	47	48	3	47	6	5	55	38	8	4	35	10	4	33	11	56	20
30	1	51	37	3	51	15	6	0	0	8	8	45	10	8	23	12	0	0

The time of the southing or meridian transit of the fixed stars in pa. 46, may be found thus. On the noon of the day, preceding the night in which you want to know the time of the southing of any of those stars, find the Sun's place in the Ephemeris, and with it take out of the above table his right ascension in time; this you may do by inspection to a minute, which will be sufficient for your present purpose. Then from the right-ascension of the star in pa. 46, corrected to the proposed time, by means of the numbers in the column of annual differences, subtract the right-ascension of the Sun, the remainder will be the estimate time of the star's southing, and will not differ from the true time above 2 or 3 minutes at most, which may be near enough for ordinary uses. But when great exactness is required, reduce the Sun's place to this estimate time, and with it find in the above table his right ascension to seconds, which being subtracted from that of the star, the remainder will be

Obliquity of the Ecliptic being $23^{\circ} 28'$.

Degr.	α			β			γ			δ			ϵ			ζ		
	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s
0	12	0	0	13	51	37	15	51	15	18	0	0	20	8	45	22	8	23
1	12	3	40	13	55	27	15	55	25	18	4	22	20	12	54	22	12	12
2	12	7	20	13	59	17	15	59	36	18	8	43	20	17	3	22	16	0
3	12	11	0	14	3	8	16	3	48	18	13	5	20	21	11	22	19	48
4	12	14	41	14	6	59	16	7	0	18	17	26	20	25	19	22	23	35
5	12	18	21	14	10	51	16	12	13	18	21	48	20	29	26	22	27	22
6	12	22	2	14	14	44	16	16	26	18	26	9	20	33	31	22	31	8
7	12	25	42	14	18	37	16	20	40	18	30	30	20	37	37	22	34	54
8	12	29	23	14	22	31	16	24	55	18	34	51	20	41	41	22	38	40
9	12	33	4	14	26	25	16	29	10	18	39	11	20	45	45	22	42	25
10	12	36	45	14	30	20	16	33	26	18	43	31	20	49	48	22	46	9
11	12	40	26	14	34	16	16	37	42	18	47	51	20	53	51	22	49	53
12	12	44	8	14	38	13	16	41	59	18	52	11	20	57	52	22	53	37
13	12	47	50	14	42	10	16	46	16	18	56	31	21	1	53	22	57	20
14	12	51	32	14	46	8	16	50	34	19	0	50	21	5	53	23	1	3
15	12	55	14	14	50	7	16	54	52	19	5	8	21	9	53	23	4	46
16	12	58	57	14	54	7	16	59	10	19	9	26	21	13	52	23	8	28
17	13	2	40	14	58	7	17	3	29	19	13	44	21	17	50	23	12	10
18	13	6	23	15	2	8	17	7	49	19	18	1	21	21	47	23	15	52
19	13	10	7	15	6	9	17	12	9	19	22	18	21	25	44	23	19	34
20	13	13	51	15	10	12	17	16	29	19	26	34	21	29	40	23	23	15
21	13	17	35	15	14	15	17	20	49	19	30	50	21	33	35	23	26	56
22	13	21	20	15	18	19	17	25	9	19	35	5	21	37	29	23	30	37
23	13	25	6	15	22	23	17	29	30	19	39	20	21	41	23	23	34	18
24	13	28	52	15	26	29	17	33	51	19	43	34	21	45	16	23	37	58
25	13	32	38	15	30	35	17	38	12	19	47	47	21	49	9	23	41	39
26	13	36	25	15	34	41	17	42	34	19	52	0	21	53	1	23	45	19
27	13	40	12	15	38	49	17	46	55	19	56	12	21	56	52	23	49	0
28	13	44	0	15	42	57	17	51	17	20	0	24	22	0	43	23	52	40
29	13	47	48	15	47	6	17	55	38	20	4	35	22	4	33	23	56	20
30	13	51	37	15	51	15	18	0	0	20	8	45	22	8	23	24	0	0

the true time of the star's culminating or southing. And if from the time of the star's southing you subtract the semidiurnal arc belonging to it, the remainder will be the time of the star's rising; and being added to it, the sum will be the time of its setting.

Annexed is an Ex. of SIRIUS for Jan. 31, 1802.

☉'s place at noon $\approx 10^{\circ} 50'$	h	m	s
Rt. Asc. of Sirius -	6	36	26
☉'s rt. asc. subtract -	20	53	47
*'s estimate southing -	9	42	39
☉'s rt. asc. at that time sub.	20	53	50
*'s true southing -	9	43	36
Semid. arc sub. & add -	4	36	55
*'s rising aftern. -	5	6	41
*'s setting -	14	20	31

A Table of the mean Right-Ascensions in time, and Declinations, and their Annual Difference; also the Semidiurnal-Arcs, and Magnitudes, of 40 remarkable fixed Stars, with their Names, and Bayer's Literal Characters, for January 1, 1800.

Names of the Stars	Ch.	Rt. Asc.			A.Di.	Declination			A.Diff.	Semid.Ar.	M	
		h	m	s	sec.	°	'	"	seconds	h	m	s
Polestar, Alruccabah	α	0	52	20	12.53	88	14	25 n	+19.6	sets not		2
Andro.gird. Mirach	β	0	58	34	3.30	34	33	29 n	+19.4	10	7	32
Andro.foot, Almach	γ	1	51	41	3.62	41	21	50 n	+17.7	sets not		2
Ram's follow.horn	α	1	55	55	3.34	22	30	47 n	+17.5	8	9	35
Whale's ja. Menkar	α	2	51	50	3.12	3	18	8 n	+15.2	6	19	48
Medusa's head, Algol	β	2	55	12	3.85	40	10	29 n	+14.5	sets not		2
Perseus' ft. Algenib	α	3	10	7	4.20	49	8	15 n	+13.6	sets not		2
Brightest of the 7ft.	α	3	35	37	3.54	23	28	36 n	+11.9	8	16	40
Bull's eye, Aldebar.	α	4	24	27	3.42	16	5	43 n	+8.0	7	28	51
Auriga's sh. Capella	α	5	1	56	4.41	45	46	40 n	+4.5	sets not		1
Orion's l. foot, Rigel	β	5	4	56	2.87	8	26	24 s	-5.1	5	20	28
Bull's north horn	β	5	13	40	3.78	28	25	37 n	+4.1	8	57	12
Orion's l. sh. Bellat.	γ	5	14	25	3.21	6	9	21 n	+4.0	6	34	41
Orion's girdle	γ	5	26	4	3.04	7	20	27 s	-3.0	5	56	42
Orion's sh. Betelge.	α	5	44	21	3.24	7	21	41 n	+1.7	6	40	58
Great Dog, Sirius	α	6	36	20	2.65	16	27	2 s	+4.4	4	36	55
1st Twin, Castor	α	7	21	49	3.86	32	18	59 n	-6.8	9	38	21
Little Dog, Procyon	α	7	28	49	3.14	5	43	45 n	-8.7	6	32	50
2d Twin, Pollux	β	7	33	3	3.69	28	29	59 n	-7.6	8	58	13
Hydra's heart, Alp.	α	9	17	45	2.94	7	46	46 s	+14.8	5	24	20
Lyon's heart, Regu.	α	9	57	42	3.20	12	56	29 n	-16.9	7	11	28
Gr. Bear, L. Pointer	β	10	49	40	3.71	57	27	3 n	-19.1	sets not		2
Gr. Bear, U. Pointer	α	10	51	16	3.85	62	49	45 n	-19.1	sets not		2
Lion's tail, Deneb	β	11	38	50	3.06	15	41	36 n	-19.8	7	27	18
G. Bear's tail, Aliath	α	12	45	13	2.75	57	2	57 n	-19.7	sets not		2
Virgius' spike	α	13	14	40	3.14	10	6	37 s	+18.8	5	12	20
Dragon's tail	α	13	58	59	1.63	65	20	8 n	-17.4	sets not		2
Bootes, Arcturus	α	14	6	32	2.72	20	13	43 n	-19.1	7	55	26
Libra, South. Scale	β	14	39	39	3.30	15	11	54 s	+15.3	4	44	23
Libra, North. Scale	α	15	6	16	3.22	8	38	3 s	+13.8	5	19	57
North Crown	α	15	25	58	2.53	27	23	58 n	-12.3	8	48	36
Scor. heart, Antares	α	16	17	10	3.65	25	58	21 s	+8.6	3	34	61
Her. head, R. Alget.	α	17	5	32	2.73	14	37	48 n	-4.7	7	20	41
Head of Serpentarius	α	17	25	39	2.77	12	43	9 n	-3.0	7	9	50
Drag. head, Rastaban	γ	17	51	58	1.39	51	31	5 n	-0.7	sets not		2
The Harp, Lyra	α	18	30	10	1.99	38	36	26 n	-10.1	sets not		1
The Eagle, Atair	α	19	41	1	2.92	8	21	11 n	-7.1	6	45	57
S. Fish, Fomalhaut	α	22	46	34	3.33	30	40	31 s	-5.1	2	52	61
Pegasus' w. Markab	α	22	54	48	2.96	14	7	56 n	+19.7	7	17	10
Andromeda's head	α	23	58	41	3.07	27	59	34 n	+20.8	8	52	19

A Table of the Longitudes, Latitudes, and Magnitudes of the most remarkable fixed Stars that the Moon can Eclipse, or make a near Appulse unto; exactly rectified to the beginning of the year 1800.

Con.	Cha.	Long.			Lat.			Mag.	Con.	Cha.	Long.			Lat.			Mag.	
♈	♈	11	21	34	2	9	44	n 4	♈	♈	12	17	52	0	21	48	n 2	
	♈	14	44	33	1	5	37	n 4		♈	12	18	13	0	1	49	14	s 3
	♈	17	4	48	0	13	11	s 4		♈	γ	22	20	32	4	24	41	n 3
	♈	18	3	7	1	48	7	n 4		♈	η	24	34	56	4	2	52	n 4
	♈	27	12	7	4	1	36	n 3		♈	κ	24	58	10	0	1	1	n 4
	♈	3	0	23	5	45	30	s 3		♈	λ	27	4	35	3	29	24	n 4
	♈	5	40	0	2	35	37	s 3		♈	δ	27	41	9	0	6	53	n 4
	♈	6	59	43	5	29	2	s 1		♈	π	29	46	51	1	57	17	s 3
	♈	19	47	0	5	21	59	n 2		♈	σ	0	8	58	5	26	15	s 3
	♈	21	59	38	2	13	29	s 3		♈	τ	0	23	56	1	2	18	n 2
	♈	0	39	0	0	55	4	s 4		♈	υ	1	51	13	1	39	52	n 4
	♈	2	30	25	0	50	34	s 3		♈	φ	5	0	36	4	0	23	s 4
	♈	5	18	43	6	46	12	s 2		♈	α	6	58	21	4	32	17	s 1
	♈	7	8	53	2	2	28	n 3		♈	γ	8	40	5	6	5	21	s 4
	♈	15	43	52	0	12	19	s 3		♈	μ	28	28	26	6	56	48	s 3
	♈	20	27	57	6	40	4	n 1		♈	λ	0	25	21	2	22	24	n 4
	♈	4	15	14	3	10	22	n 4		♈	φ	3	31	54	2	5	31	s 4
	♈	5	55	32	0	4	13	n 4		♈	σ	7	33	11	3	55	22	s 3
	♈	18	51	46	3	1	57	s 4		♈	τ	9	35	40	3	24	55	s 3
♈	21	28	1	3	46	1	s 4	♈	υ	12	2	55	5	2	33	s 3		
♈	25	6	46	4	51	9	n 4	♈	φ	12	11	59	0	53	36	n 3		
♈	27	3	12	0	27	27	n 1	♈	π	13	27	44	1	28	7	n 4		
♈	3	35	48	0	8	29	n 4	♈	β	1	15	18	4	36	46	n 3		
♈	18	43	10	0	31	21	s 4	♈	γ	17	24	23	4	57	31	s 4		
♈	22	14	55	3	2	51	s 4	♈	δ	18	59	16	2	32	6	s 4		
♈	24	19	10	0	41	36	n 3	♈	ι	20	44	28	7	33	40	s 3		
♈	0	34	33	5	4	42	n 3	♈	θ	25	55	40	2	3	47	s 4		
♈	2	2	39	1	22	24	n 3	♈	λ	0	28	5	2	43	22	n 4		
♈	7	23	4	2	48	57	n 3	♈	φ	8	47	6	0	22	57	s 4		
♈	21	3	13	2	2	11	s 1	♈	φ	14	20	58	1	2	8	s 4		

This table shewing the mean longitudes of 60 stars to the beginning of the year 1800, their mean longitudes for any other time may be found if $50\frac{1}{2}$ seconds be added for each succeeding, and subtracted for each preceding year, and proportionably for a part of a year. Thus, to find the longitude of the first star ♈♈, or ♈ piscium, for Feb. 15, 1802, or 2 years and one eighth after the tabular time; here $2\frac{1}{8}$ times $50\frac{1}{2}$ sec. make $1^{\circ} 47''$, which being added to the tabular longitude, gives ♈ $11^{\circ} 23' 21''$ for the longitude required at the proposed time.—The latitudes vary not.

The Latitudes and Longitudes of Ninety remarkable Places.

	Lat. ° /	Long. ° /		Lat. ° /	Long. ° /
Alexandria, Egypt	31 11 n	30 17 e	Isfahan	32 25 n	52 55 e
Amsterdam, Hol.	52 23 n	4 52 e	Land's end	50 6 n	5 50 w
Archangel, Ruf.	64 34 n	38 30 e	Leghorn	43 33 n	10 25 e
Athens	37 40 n	23 52 e	Leostoff	52 38 n	1 54 e
Babelmandel	12 50 n	43 50 e	Liverpool	53 22 n	3 10 w
Batavia	6 12 s	106 45 e	Lima	12 1 s	76 50 w
Bengal	22 0 n	92 45 e	Lisbon	38 42 n	9 4 w
Berlin	52 33 n	13 26 e	Lizard	49 57 n	5 21 w
Bombay Isle	19 42 n	73 3 e	London	51 31 n	0 0
Boston, Amer.	42 25 n	70 37 w	Madras	13 8 n	80 7 e
Breslau	51 3 n	17 13 e	Madrid	40 25 n	3 45 w
Brest	48 23 n	4 30 w	Manilla	14 30 n	120 25 e
Bristol	51 28 n	2 30 w	Marseilles	43 18 n	5 21 e
Buenos Ayres	34 35 s	58 0 w	Mexico	19 54 n	100 5 w
Cadiz	36 31 n	6 7 w	Mississipi, mouth	29 0 n	89 17 w
Calais	50 58 n	1 51 e	Moscow	55 25 n	37 51 e
Cairo, Egypt	30 2 n	31 26 e	Naples	40 51 n	14 19 e
Cambridge	52 13 n	0 4 e	Newcastle	55 0 n	1 18 w
Canaria Islands	28 1 n	15 0 w	Oporto	40 53 n	8 35 w
Canton	23 8 n	113 2 e	Orkney I. northend	59 24 n	3 23 w
Cape of Goodhope	34 29 s	18 23 e	Oxford	51 45 n	1 16 w
Cape Horn	55 59 s	67 26 w	Paris	48 50 n	2 25 e
Carthegena	10 27 n	75 26 w	Pekin	39 55 n	116 22 e
Charles Town Am.	33 22 n	79 50 w	Petersburg	59 56 n	30 19 e
Constantinople	41 0 n	28 53 e	Philadelphia	39 57 n	75 18 w
Copenhagen	55 41 n	12 50 e	Plymouth	50 24 n	4 15 w
Corinth	37 30 n	23 0 e	Port Mahon	39 51 n	3 53 e
Corke	51 54 n	8 30 w	Port Royal, Jam.	17 40 n	76 37 w
Dantzic	54 22 n	18 36 e	Portsmouth	50 48 n	1 1 w
Dover	51 7 n	1 19 e	Prague	50 5 n	14 15 e
Dublin	53 20 n	6 55 w	Quebec	46 55 n	71 12 w
Edinburgh	55 58 n	3 1 w	Rome	41 54 n	12 32 e
Ferro, Isle	27 48 n	18 6 w	Scilly Isles	50 0 n	6 45 w
Finisterre, Cape	42 57 n	9 36 w	Smyrna	38 28 n	27 25 e
Genoa	44 25 n	8 41 e	Stockholm	59 22 n	18 12 e
Gibraltar	36 5 n	4 46 w	Syracuse	37 4 n	15 20 e
Glasgow	55 52 n	4 5 w	Tangier	35 55 n	5 45 w
Goa	15 31 n	73 50 e	Teneriff	28 16 n	16 32 w
Göttingen	51 32 n	9 58 e	Tunis	36 47 n	10 16 e
Greenwich	51 29 n	0 5 e	Turin	45 5 n	7 45 e
Hacluit's Head.	79 55 n	12 0 e	Venice	45 27 n	12 24 e
Halifax, America	44 46 n	63 20 w	Verd, Cape	14 47 n	17 28 w
Havanna	23 12 n	81 11 w	Vienna	48 11 n	16 28 e
Helena, I. St.	15 55 s	5 49 w	Upsal	59 52 n	17 43 e
Jerusalem	31 50 n	35 25 e	Uraniberg.	55 54 n	12 52 e