A

SETT

OF

Correct Aſtronomical TABLES.

TABLES for finding the Longitude by Sea and Land.

A Table of the Depreſſion or Dip of the Horiſon of the Sea for different Elevations of the Eye above the Surface.

Elevation of the Eye above the Sea in Feet.	Depreſſion of the Horiſon of the Sea in Minutes.
1	1
4	2
10	3
17	4
27	5
39	6
53	7
69	8

A Table ſhewing how many Minutes the Water's Edge at any Land at a given Diſtance is depreſſed below the true Level for different Elevations of the Eye above the Surface of the Water.

Diſtance of the Land in Sea Miles.	Elevation of the Eye above the ſurface of the water in feet			
	10 F.	17 F.	27 F.	39 F.
	Depreſſion of the Land at the Water's Edge below the true Level in Minutes.			
¼	22	38	61	88
½	11	19	30	44
¾	8	13	20	29
1	6	10	15	22
1¼	5	8	12	18
1½	4	7	11	15
2	3	5	8	12
2½	3	5	7	10
3	3	4	6	8
3½	3	4	6	7
4	3	4	5	7
5	3	4	5	6
6	3	4	5	6

A Table of the Refraction of the Heavenly Bodies at different Altitudes.

Apparent Altitude.	Refraction in Minutes.
° ′	′
0. 0	33
0. 4	32
0. 12	31
0. 19	30
0. 27	29
0. 33	28
0. 40	27
0. 48	26
0. 56	25
1. 4	24
1. 13	23
1. 22	22
1. 32	21
1. 43	20
1. 55	19
2. 7	18
2. 21	17
2. 36	16
2. 53	15
3. 11	14
3. 32	13
3. 56	12
4. 24	11
4. 56	10
5. 36	9
6. 22	8
7. 23	7
8. 42	6
10. 30	5
13. 10	4
17. 28	3
25. 20	2
43. 34	1
51. 40	0¾
62. 20	0½
75. 13	0¼
90. 0	0

A Catalogue of the Right Aſcenſions and Declinations of the principal fixed Stars of the 1ſt and 2d Magnitude, adapted to the Beginning of the Year 1765, with their Variations in ten Years.

Names of the Stars.	Character	Magnitude.	Right Aſcenſion.	R. Aſc. increaſing in 10years	Declination.	Dec. inc. or diminiſhes in 10years.
			° ′	′ ″	° ′	′ ″
Extremity of the Wing of Pegaſus, *Algenib*	γ	2	0.17	7. 42	13. 53 N.	+3. 20
In the Head of the Phœnix	α	2	3.39	7. 30	43. 35 S.	−3. 20
The bright Star in the Tail of the Whale	β	2	7.57	7. 32	19. 17 S.	−3, 18
In the Girdle of Andromeda	β	2	14. 9	8. 14	34. 22 N.	+3. 14
The Spring of the River Eridanus, *Achernar*	α	1	22.14	5. 37	58. 26 S.	−3. 5
In the Jaw of the Whale	α	2	42.30	7. 49	3. 9 N.	+2. 28
In the Head of Meduſa, *Algol*	β	2	43. 5	9. 36	40. 2 N.	+2. 26
The bright Star of Perſeus	α	2	46.55	10. 29	49. 0 N.	+2. 17
The South Eye of the Bull, *Aldebaran*	α	1	65.37	8. 34	16. 1 N.	+1. 23
The bright Star in the left Shoulder of Auriga, *Capella*	α	1	74.50	11. 0	45. 44 N.	+0. 53
The bright Foot of Orion, *Rigel*	β	1	75 42	7. 12	8. 29 S.	−0. 50
The North Horn of the Bull	β	2	77.42	9. 27	28. 23 N.	+0. 43
The Weſtern Shoulder of Orion	γ	2	78. 8	8. 3	6. 7 N.	+0. 42
Bright Star in the Dove	α	2	82.47	5. 30	34. 13 S.	−0. 25
The Eaſtern Shoulder of Orion	α	1	85.37	8. 7	7. 21 N.	+0. 16
The bright Star in the Poop of the Ship Argo, *Canobus*	α	1	94.41	3, 21	52. 34 S.	+0. 16
The bright Star in the Dog's Mouth Sirius	α	1	98.42	6. 43	16. 24 S.	+0. 30
In the Head of the Northern Twin Caſtor	α	1	109.53	9. 41	32. 23 N.	−1. 7
The little Dog Procyon	α	1	111.45	8. 0	5. 49 N.	−1. 13
In the Head of the Southern Twin Pollux	β	1	112.44	9. 23	28. 35 N.	−1. 17
Bright Star in the Oars of the Ship Argo	β	1	137.38	1. 52	68. 45 S.	+2. 28
The Heart of the female Hydra	α	2	139. 1	7. 24	7. 39 S.	+2. 31
The Lyon's Heart, *Regulus*	α	1	148.57	8. 6	13. 6 N.	−2. 51
The Northernmoſt Star in the Square of the great Bear	α	2	162.15	9. 44	63. 1 N.	−3. 10
The Lyon's Tail	β	2	174.16	7. 47	15. 53 N.	−3. 19
The ſouthernm. Star of the Croſiers, or the ſt of the Croſs	α	1	183.26	8. 3	61. 48 S.	+3. 20
The Virgin's Spike	α	1	198.13	7. 52	9. 55 S.	+3. 10
The laſt Star in the Tail of the great Bear	η	2	204.34	6. 1	50. 30 N.	−3. 2
The Weſternmoſt Foot of the Centaur	β	2	206.52	10. 13	59. 13 S.	+2. 59
The bright Star in Bootes, *Arcturus*	α	1	211.14	7. 3	20. 25 N.	−2. 52
The bright Star in the Eaſtern Foot of the Centaur	α	1	215.59	11. 1	59. 51 S.	+2. 42
The Southern Scale of Libra	α	2	219.29	8. 16	15, 3 S.	+2. 35
The Northern Scale of Libra	β	2	226. 6	8. 3	8. 30 S.	+2. 20
The bright Star of the Crown	α	2	231.11	6. 20	27. 31 N.	−2. 6
The Northernmoſt Star in the Scorpion's Forehead	β	2	237.57	8. 40	19. 8 S.	+1. 47

A Continuation of the Table of the Right Aſcenſions and Declinations of the principal fixed Stars.

Names of the Stars.	Character.	Magnitude.	Right Aſcenſion.	R. Aſc. increaſing in 10 years	Declination.	Dec. inc. or diminiſhes in 10 years.
			° ′	′ ″	° ′	′ ″
The Scorpion's Heart, *Antares*	α	1	243. 45	9. 8	25. 53 S.	+1. 29
In the Eaſtern Knee of Ophiucus	η	2	254. 14	8. 36	15. 25 S.	+0. 55
The Head of Ophiucus	α	2	261. 0	6. 57	12. 45 N.	−0. 32
The bright Star of the Harp, *Lyra*	α	1	277. 15	5. 3	38. 35 N.	+0. 25
The bright Star of the Eagle, *Atair*	α	2	294. 50	7. 15	8. 16 N.	+1. 23
The Eye of the Peacock	α	2	301. 44	12. 13	57. 28 S.	−1. 44
The Tail of the Swan	α	2	308. 21	5. 7	44. 27 N.	+2. 4
The Weſternmoſt Wing of the Crane	α	2	328. 20	9. 56	48. 5 S.	−2. 50
In the Mouth of the Southern Fiſh, *Fomalhaut*	α	1	341. 9	8. 21	30. 52 S.	−3. 9
In the Shoulder of Pegaſus	β	2	343. 6	7. 12	26. 49 N.	+3. 11
In the Wing of Pegaſus, *Markab*	α	1	343. 16	7. 27	13. 57 N.	+3. 12
The Head of Andromeda	α	2	359. 4	7. 40	27. 47 N.	+3. 20

A Table to turn Degrees and Minutes of the Diurnal Motion into Hours, Minutes, and Seconds of Time.

D. M.	M. S.	D. M.	H.M. M. S.	D. M.	H.M. M. S.	D. M.	H.M. M. S.	D.	H.M.	D.	H.M.
1	4	16	1. 4	31	2. 4	46	3. 4	61	4. 4	76	5. 4
2	8	17	1. 8	32	2. 8	47	3. 8	62	4. 8	77	5. 8
3	12	18	1. 12	33	2. 12	48	3. 12	63	4. 12	78	5. 12
4	16	19	1. 16	34	2. 16	49	3. 16	64	4. 16	79	5. 16
5	20	20	1. 20	35	2. 20	50	3. 20	65	4. 20	80	5. 20
6	24	21	1. 24	36	2. 24	51	3. 24	66	4. 24	81	5. 24
7	28	22	1. 28	37	2. 28	52	3. 28	67	4. 28	82	5. 28
8	32	23	1. 32	38	2. 32	53	3: 32	68	4. 32	83	5. 32
9	36	24	1. 36	39	2. 36	54	3. 36	69	4. 36	84	5. 36
10	40	25	1. 40	40	2. 40	55	3. 40	70	4: 40	85	5. 40
11	44	26	1. 44	41	2. 44	56	3. 44	71	4. 44	86	5. 44
12	48	27	1. 48	42	2. 48	57	3. 48	72	4. 48	87	5. 48
13	52	28	1. 52	43	2. 52	58	3. 52	73	4. 52	88	5. 52
14	56	29	1. 56	44	2. 56	59	3. 56	74	4. 56	89	5. 56
15	60	30	2. 0	45	3. 0	60	4. 0	75	5. 0	90	6. 0

A Continuation of the Table to turn Degrees into Time.

D.	H.M.	D.	H.M.	D.	H.M.	D.	H.M.
95	6.20	170	11.20	245	16.20	320	21.20
100	6.40	175	11.40	250	16.40	325	21.40
105	7. 0	180	12. 0	255	17. 0	330	22. 0
110	7.20	185	12.20	260	17.20	335	22.20
115	7.40	190	12.40	265	17.40	340	22.40
120	8. 0	195	13. 0	270	18. 0	345	23. 0
125	8.20	200	13.20	275	18.20	350	23.20
130	8.40	205	13.40	280	18.40	355	23.40
135	9. 0	210	14. 0	285	19. 0	360	24. 0
140	9.20	215	14.20	290	19.20		
145	9.40	220	14.40	295	19.40		
150	10. 0	225	15. 0	300	20. 0		
155	10.20	230	15.20	305	20.20		
160	10.40	235	15.40	310	20.40		
165	11. 0	240	16. 0	315	21. 0		

A Table of the Limits which the Difference of the Moon's and Star's Latitudes, if of the same Denomination, or Sum, if of contrary denomination, should not exceed.

Distance of the Moon from the Star, or the Difference of their Longitudes.	Limits for the Difference, or Sum, of the Latitudes.
0	0
10	1
15	2
20	$2\frac{1}{2}$
25	$3\frac{1}{2}$
30	4
35	5
40	6
45	7
50	8
60	12
70	20
80	36

A Catalogue of the Longitudes and Latitudes of twelve Zodiacal Stars of the first and second Magnitude, proper to measure the Distance of the Moon from, in order to determine the Longitude by Sea or Land. Adapted to the Beginning of the Year 1763.

N. B. The Longitude of the Stars in this Catalogue are to be corrected by the Addition of the Numbers in the next Table, and are also to be augmented at the Rate of 50″ $\frac{1}{2}$ for every Year after 1763.

Names of the Stars.	Cha.	Mag.	Longitude. S. ° ′ ″	Latitude. ° ′ ″
Extremity of the Wing of Pegasus, *Algenib*	γ	2	0. 5. 51. 13	12. 35. 6 *N.*
The bright Star in the Jaw of the Whale	α	2	1. 11. 0. 29	12. 36. 16 *S.*
The South Eye of the Bull, *Aldebaran.* A red Star	α	1	2. 6. 28. 31	5. 29. 9 *S.*
The North Horn of the Bull	β	2	2. 19. 15. 46	5. 21. 55 *N.*
The Southernmost of the Twins, *Pollux*	β	2	3. 19. 56. 50	6. 39. 55 *N.*
The Lyon's Heart, *Regulus.* A red Star	α	1	4. 26. 32. 8	0. 27. 20 *N.*
The Virgin's Spike	α	1	6. 20. 32. 1	2. 2. 9 *S.*
The Scorpion's Heart, *Antares.* A red Star	α	1	8. 6. 26. 59	4. 32. 35 *S.*
In the Southern Part of the Bow of Sagittary	ε	2	9. 1. 46. 7	11. 0. 25 *S.*
In the Head of Capricorn	α	2	10. 0. 26. 53	6. 58. 29 *N.*
Bright Star in the mouth of the southern fish, *Fomalhaut*	α	1	11. 0. 31. 12	21. 6. 13 *S.*
In the Wing of Pegasus, *Markab*	α	1	11. 20. 10. 53	19. 24. 46 *N.*

A Table of the Semidiameter and Hourly Motion of the Sun; and of the Corrections of the Longitudes of the Zodiacal Stars, for every Day in the Year.

Days of the Month.	Semidiameter of the Sun.	Hourly Motion of the Sun.	α Wing of Pegasus Algen.	α Jaw of the Whale.	α Bull's S. Eye, Aldebaran.	β North Horn of the Bull	β South Twin Pollux.	α Lyon's Heart Regulus.	α The virgin's Spike.	α The Scorpion's Heart Antares	ε In Bow of Sagittary.	α Head of Capricorn	α Mouth of S. fish Fomalhaut	α Wing of Pegasus. Mark.
	′ ″	′ ″	″	″	″	″	″	″						
Jan. 1	16. 21	2. 33	8	15	18	18	20	14	0	0	0	0	2	6
10	16. 21	2. 33	6	13	17	18	21	17	4	3	2	0	1	4
20	16. 20	2. 33	5	11	17	18	23	21	9	8	6	2	1	3
Feb. 1	16. 18	2. 32	2	8	14	16	22	23	14	12	9	3	0	1
10	16. 17	2. 32	1	6	12	14	22	25	18	16	12	5	0	0
20	16. 15	2. 31	0	5	11	13	22	27	23	22	17	9	2	1
Mar. 1	16. 13	2. 30	0	3	8	11	21	27	26	26	21	12	3	1
10	16. 10	2. 29	0	1	6	9	19	27	29	30	25	15	5	2
20	16. 7	2. 29	1	1	5	7	18	28	33	35	30	20	9	4
Apr. 1	16. 4	2. 28	2	0	2	4	15	26	35	40	35	25	12	6
10	16. 2	2. 27	5	0	2	3	14	26	37	44	40	30	16	10
20	15. 59	2. 26	7	0	1	2	12	24	38	47	44	34	20	13
May 1	15. 56	2. 25	10	1	0	0	9	21	38	50	49	39	25	16
10	15. 54	2. 25	14	3	1	1	8	20	38	53	53	44	30	21
20	15. 53	2. 24	17	5	1	0	6	18	37	55	56	48	34	25
June 1	15. 51	2. 23	23	9	3	1	5	16	37	57	60	53	39	31
10	15. 50	2. 23	27	12	5	2	5	14	35	57	61	56	44	35
20	15. 49	2. 23	31	15	7	3	4	12	33	57	63	59	48	39
July 1	15. 49	2. 23	36	20	10	6	5	11	32	58	65	63	53	45
10	15. 49	2. 23	40	23	13	9	6	10	30	57	65	65	56	48
20	15. 50	2. 23	44	28	17	11	7	10	28	55	65	66	59	52
Aug. 1	15. 51	2. 23	50	33	22	16	10	10	26	54	65	68	63	57
10	15. 53	2. 24	53	37	26	20	12	10	24	52	64	68	64	60
20	15. 55	2. 25	58	42	31	25	16	12	23	51	63	69	67	63
Sept. 1	15. 57	2. 25	61	47	36	30	20	13	21	48	61	68	68	66
10	15. 59	2. 26	63	51	40	34	24	15	20	46	59	66	68	67
20	16. 2	2. 27	66	56	45	39	29	19	21	45	57	65	69	69
Oct. 1	16. 5	2. 28	67	59	50	43	33	22	21	43	55	63	68	69
10	16. 7	2. 28	69	62	54	48	38	26	22	42	54	62	68	70
20	16. 10	2. 29	69	64	58	52	42	30	23	41	52	60	66	69
Nov. 1	16. 13	2. 30	69	67	62	57	48	36	26	40	50	58	64	68
10	16. 15	2. 31	68	68	64	60	52	40	27	40	49	56	62	67
20	16. 17	2. 32	66	68	66	63	56	44	31	40	47	54	60	64
Dec. 1	16. 19	2. 32	65	69	68	66	61	50	36	42	48	52	58	63
10	16. 20	2. 33	63	68	69	67	64	54	40	44	48	51	56	60
20	16. 21	2. 33	61	67	69	69	68	60	45	47	49	51	54	59
31	16. 21	2. 33	58	65	68	68	70	64	50	50	50	50	52	56

Tables of the Sun and Moon.

Tables of the Sun for the Meridian of the Royal Observatory at *Greenwich*.

Epochs of the Sun's mean Longitude for the Beginning of the Year.

Years.	Mean Long. ☉	Long. Apog.
	s. ° ′ ″	s. ° ′ ″
L 1760	9. 10. 35. 8	3. 8. 47. 25
1761	9. 10. 20. 48	48. 30
1762	9. 10. 6. 28	49. 35
1763	9. 9. 52. 8	50. 40
L. 1764	9. 10. 36. 57	51. 45
1765	9. 10. 22. 37	52. 50
1766	9. 10. 8. 17	53. 55
1767	9. 9. 53. 58	55. 0
L. 1768	9. 10. 38. 46	56. 5
1769	9. 10. 24. 26	57. 10
1770	9. 10. 10. 7	58. 15
1771	9. 9. 55. 47	3. 8. 59 20
L. 1772	9. 10. 40. 35	3. 9. 0. 25
1773	9. 10. 26. 16	1. 30
1774	9. 10. 11. 56	2. 35
1775	9. 9. 57. 36	3. 40
L. 1776	9. 10. 42. 25	4. 45
1777	9. 10. 28. 5	5. 50
1778	9. 10. 13. 45	6. 55
1779	9. 9. 59. 25	8. 0
L. 1780	9. 10. 44. 14	9. 5

Motion of the Sun to the Beginning of each Month.

Months	Mean Mot. of ☉	Mot. of Apog.
	s ° ′ ″	″
Jan.	0. 0. 0. 0	0
Feb.	1. 0. 33. 18	5
March	1. 28. 9. 11	10
April	2. 28. 42. 30	16
May	3. 28. 16. 40	21
June	4. 28. 49. 58	27
July	5. 28. 24. 8	32
Auguſt	6. 28. 57. 26	38
Sept.	7. 29. 30. 44	43
October	8. 29. 4. 54	49
Nov.	9. 29. 38. 12	54
Dec.	10. 29. 12. 22	59

Motion of the Sun for Days of the Month.

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

In the Months of January and Feb. in Leap Year, compute for the Day preceding the given Day.

Motion of the Sun for Hours, Min. and Sec.

S. M	″ ‴	S. M	″ ‴
H	′ ″	M	′ ″
1	2. 28	25	1. 2
2	4. 56	26	1. 4
3	7. 23	27	1. 6
4	9. 51	28	1. 9
5	12. 19	29	1. 11
		30	1. 14
6	14. 47		
7	17. 15	31	1. 16
8	19. 43	32	1. 19
9	22. 11	33	1. 21
10	24. 38	34	1. 24
		35	1. 26
11	27. 6		
12	29. 34	36	1. 29
13	32. 2	37	1. 31
14	34. 30	38	1. 34
15	36. 58	39	1. 36
		40	1. 38
16	39. 26		
17	41. 53	41	1. 41
18	44. 21	42	1. 43
19	46. 49	43	1. 46
20	49. 17	44	1. 48
		45	1. 51
21	51. 45		
22	54. 13	46	1. 53
23	56. 40	47	1. 56
24	59. 8	48	1. 58
		49	2. 1
		50	2. 3
		51	2. 6
		52	2. 8
		53	2. 11
		54	2. 13
		55	2. 15
		56	2. 18
		57	2. 20
		58	2. 23
		59	2. 25
		60	2. 28

Equation of the Sun's Center.

Argum. The mean Anomaly of the Sun.

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

Equation of the Sun's Center.
Argum. The mean Anomaly of the Sun.

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

A Table of the Equation of Time.

Longitude of the Sun.

S.	0	1	2	3	4	5	6	7	8	9	10	11
	±	−	∓	+	+	±	−	−	−	∓	+	+
D	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″
0	7.36	1. 9	3.51	1.13	5.57	2.20	7.38	15.31	13.33	1.11	11.28	14.19
1	7.17	1.23	3.47	1.26	5.59	2. 4	7.58	15.39	13.17	0.42	11.45	14.13
2	6.58	1.36	3.42	1.40	6. 0	1.48	8.19	15.46	13. 0	−.12	12. 1	14. 6
3	6.39	1.48	3.37	1.53	6. 1	1.31	8.40	15.52	12.42	+.17	12.17	13.59
4	6.20	2.00	3.32	2. 7	6. 1	1.14	9. 1	15.57	12.23	0.46	12.32	13.51
5	6. 1	2.11	3.26	2.20	6. 0	0.56	9.21	16. 2	12. 4	1.16	12.46	13.43
6	5.42	2.22	3.19	2.33	5.59	0.38	9.41	16. 6	11.44	1.45	12.59	13.34
7	5.24	2.32	3.12	2.45	5.57	0.20	10. 1	16. 9	11.23	2.14	13.12	13.24
8	5. 5	2.42	3. 4	2.58	5.54	+. 1	10.20	16.11	11. 1	2.43	13.24	13.14
9	4.47	2.51	2.56	3.11	5.51	−.18	10.39	16.13	10.39	3.11	13.35	13. 3
10	4.28	3. 0	2.47	3.23	5.47	0.37	10.57	16.13	10.16	3.39	13.45	12.51
11	4. 9	3. 8	2.38	3.35	5.42	0.57	11.15	16.13	9.53	4. 7	13.54	12.39
12	3.50	3.16	2.29	3.46	5.37	1.17	11.33	16.12	9.29	4.35	14. 2	12.27
13	3.32	3.23	2.19	3.58	5.31	1.38	11.51	16.10	9. 5	5. 2	14. 9	12.14
14	3.13	3.30	2. 8	4. 9	5.24	1.58	12. 8	16. 7	8.40	5.29	14.16	12. 0
15	2.55	3.36	1.57	4.19	5.17	2.19	12.25	16. 4	8.14	5.56	14.22	11.46
16	2.37	3.41	1.46	4.29	5. 9	2.40	12.41	16. 0	7.48	6.22	14.27	11.31
17	2.19	3.46	1.35	4.39	5. 1	3. 1	12.57	15.55	7.22	6.48	14.31	11.16
18	2. 1	3.50	1.23	4.48	4.52	3.22	13.12	15.49	6.55	7.13	14.35	11. 1
19	1.43	3.53	1.11	4.57	4.43	3.44	13.27	15.42	6.28	7.37	14.38	10.46
20	1.26	3.56	0.59	5. 5	4.33	4. 5	13 42	15.35	6. 0	8. 1	14.40	10.30
21	1. 9	3.58	0.46	5.13	4.22	4.26	13.56	15.26	5.32	8.24	14.41	10.14
22	0.52	4. 0	0.34	5.20	4.11	4.47	14. 9	15.17	5. 4	8.47	14.42	9.58
23	0.36	4. 1	0.21	5.27	3.59	5. 9	14.21	15. 7	4.36	9. 9	14.41	9.41
24	0.20	4. 1	−.8	5.33	3.46	5.30	14.33	14.56	4. 8	9.31	14.40	9.24
25	+. 4	4. 1	+.5	5.39	3.33	5.52	14.44	14.44	3.39	9.53	14.39	9. 6
26	−.11	4. 0	0.19	5.44	3.19	6.13	14.55	14.31	3.10	10.14	14.37	8.48
27	0.26	3.59	0.32	5.48	3. 4	6.35	15. 5	14.17	2.41	10.34	14.34	8.30
28	0.40	3.57	0.46	5.52	2.50	6.56	15.14	14. 3	2.11	10.53	14.30	8.12
29	0.55	3.54	0.59	5.55	2.35	7.17	15.23	13.48	1.41	11.11	14.25	7.54
30	1. 9	3.51	1.13	5.57	2.20	7.38	15.31	13.33	1.11	11.28	14.19	7.36

The Equations marked + are to be added to apparent Time; and thoſe marked − are to be ſubſtracted from apparent Time to find mean time.

Tables of the Moon for the Meridian of the Royal Observatory at *Greenwich*.

Epochs of the Moon's mean Longitude. Mean Anomaly and Longitude of ascending Node, for the Beginning of the Year.

Years.	Mean Lo. ☽	Mean An. ☽	Long. of ☊
	♌ ° ′ ″	♌ ° ′ ″	♌ ° ′ ″
L. 1760	2.21.44.59	7.13.50.27	2.26.52. 6
1761	7. 1. 8. 4	10.12.33.10	2. 7.32.25
1762	11.10.31. 9	1.11.16.53	1.18.12.43
1763	3.19.54.15	4.10. 0. 6	0.28.53. 2
L. 1764	8.12.27.55	7.21.47.13	0. 9.30.10
1765	0.21.51. 0	10.20.30.26	11.20.10.29
1766	5. 1.14. 6	1.19.13.39	11. 0.50.48
1767	9.10.37.11	4.17.56.52	10.11.31. 6
L. 1768	2. 3.10.51	7.29.43.59	9.22. 8.15
1769	6.12.33.57	10.28 27.12	9. 2.48.33
1770	10.21.57. 2	1.27.10.25	8.13.28.52
1771	3. 1.20. 7	4.25.53.38	7.24. 9.11
L. 1772	7.23.53.48	8. 7.40.45	7. 4.46.19
1773	0. 3.16.53	11. 6.23.58	6.15.26.38
1774	4.12.39.58	2. 5. 7.11	5.26. 6.57
1775	8.22. 3. 4	5. 3.50.24	5. 6.47.15
L. 1776	1.14.36.44	8.15.37.31	4.17.24.23
1777	5.23.59.49	11.14.20.41	3.28. 4 42
1778	10. 3.22.55	2.13. 3.57	3. 8.45. 1
1779	2.12.46. 0	5.11.47.10	2.19.25.20
L. 1780	7. 5 19.41	8.23.34.17	2. 0. 2.28

Mean Motion of the Moon, Motion of mean Anomaly, and Node, to the Beginning of each Month.

Months	Mean Mo. ☽	Mo. Mn An.	Motion of ☊
	♌ ° ′ ″	♌ ° ′ ″	° ′ ″
Jan.	0. 0. 0. 0	0. 0. 0. 0	0. 0. 0
Feb.	1.18.28. 6	1.15. 0.53	1. 38. 30
March	1.27.24.27	1.20.50. 3	3. 7. 27
April	3.15.52.33	3. 5.50.56	4. 45. 57
May	4.21.10. 3	4. 7.47.54	6. 21. 16
June	6. 9.38. 9	5.22.48.47	7. 59. 46
July	7.14.55.40	6.24.45.46	9. 35. 5
August	9. 3.23.46	8. 9.46.38	11. 13. 34
Sept.	10.21.51.52	9.24.47.31	12. 52. 4
October	11.27. 9.23	10.26.44.29	14. 27. 23
Nov.	1.15.37.29	0.11.45.22	16. 5. 53
Dec.	2.20.54.59	1.13.42.20	17. 41. 12

Mean Motion of the Moon, Motion of mean Anomaly, and Node for Days of the Month.

Days.	Mean Mo. ☽	Mo. Mn An.	Motion of ☊
	♌ ° ′ ″	♌ ° ′ ″	° ′ ″
1	0.13.10.35	0.13. 3.54	0. 3. 11
2	0.26.21.10	0.26. 7.48	0. 6. 21
3	1. 9.31.45	1. 9.11 42	0. 9. 32
4	1.22.42.20	1.22.15.36	0. 12. 43
5	2. 5.52.55	2. 5.19.30	0. 15. 53
6	2.19. 3.30	2.18.23 24	0. 19. 4
7	3. 2.14. 5	3. 1.27.18	0. 22. 14
8	3 15.24.40	3.14.31.12	0. 25. 25
9	3.28.35.15	3.27.35. 6	0. 28. 36
10	4.11.45.50	4.10.39. 0	0. 31. 46
11	4.24.56.25	4.23.42.53	0. 34. 57
12	5. 8. 7. 0	5. 6.46.47	0. 38. 7
13	5.21.17.35	5.19.50.41	0. 41. 18
14	6. 4.28.10	6. 2.54.35	0. 44. 29
15	6.17.38.45	6.15.58.29	0. 47. 40
16	7. 0.49.20	6 29. 2.23	0. 50. 50
17	7.13.59.55	7.12. 6.17	0. 54. 1
18	7.27.10.30	7.25.10.11	0. 57. 11
19	8.10.21. 6	8. 8.14. 5	1. 0. 22
20	8.23.31.41	8.21.17.59	1. 3. 33
21	9. 6.42.16	9. 4 21.53	1. 6. 43
22	9.19.52.51	9.17.25.47	1. 9. 54
23	10. 3. 3.26	10. 0.29.41	1. 13. 5
24	10.16.14. 1	10.13.33.35	1. 16. 15
25	10.29.24.36	10.26.37.29	1. 19. 26
26	11.12.35.11	11. 9 41.23	1. 22. 36
27	11.25.45.46	11.22.45.17	1. 25. 47
28	0. 8.56.21	0. 5.49.11	1. 28. 58
29	0.22. 6.56	0.18.53. 5	1. 32. 8
30	1. 5.17.31	1. 1.56.59	1. 35. 19
31	1.18.28. 6	1.15. 0.53	1. 38. 30

In the Months of *January* and *February* in Leap-Year, compute for the Day preceding the given Day.

A Table of the mean Motions of the Moon, Mean Anomaly, and Node for Hours, Minutes and Seconds.

	Mean Motion of the Moon.			Motion of mean Anomaly.			Motion of				Mean Motion of the Moon.			Motion of mean Anomaly.			Motion of		
	″	″	‴	iv	″	‴	iv	″	‴	iv		″	‴	iv	″	‴	iv	″	‴	iv
	′	′	″	‴	′	″	‴	′	″	‴		′	″	‴	′	″	‴	′	″	‴
Ho.	o	′	″		o	′	″	o	′	″	Ho.	o	′	″	o	′	″	o	′	″
0	0	0	0		0	0	0	0	0	0	30	16	28	14	16	19	52	0	3	58
1	0	32	56		0	32	40	0	0	8	31	17	1	10	16	52	32	0	4	6
2	1	5	53		1	5	19	0	0	16	32	17	34	7	17	25	12	0	4	14
3	1	38	49		1	37	59	0	0	24	33	18	7	3	17	57	52	0	4	22
4	2	11	46		2	10	39	0	0	32	34	18	40	0	18	30	31	0	4	30
5	2	44	42		2	43	19	0	0	40	35	19	12	56	19	3	11	0	4	38
6	3	17	39		3	15	58	0	0	48	36	19	45	53	19	35	51	0	4	46
7	3	50	35		3	48	38	0	0	56	37	20	18	49	20	8	31	0	4	54
8	4	23	32		4	21	18	0	1	4	38	20	51	45	20	41	10	0	5	2
9	4	56	28		4	53	58	0	1	11	39	21	24	42	21	13	50	0	5	10
10	5	29	25		5	26	37	0	1	19	40	21	57	38	21	46	30	0	5	18
11	6	2	21		5	59	17	0	1	27	41	22	30	35	22	19	10	0	5	26
12	6	35	18		6	31	57	0	1	35	42	23	3	31	22	51	49	0	5	34
13	7	8	14		7	4	37	0	1	43	43	23	36	28	23	24	29	0	5	42
14	7	41	10		7	37	16	0	1	51	44	24	9	24	23	57	9	0	5	50
15	8	14	7		8	9	56	0	1	59	45	24	42	21	24	29	49	0	5	57
16	8	47	3		8	42	36	0	2	7	46	25	15	17	25	2	28	0	6	5
17	9	20	0		9	15	16	0	2	15	47	25	48	14	25	35	8	0	6	13
18	9	52	56		9	47	55	0	2	23	48	26	21	10	26	7	48	0	6	21
19	10	25	53		10	20	35	0	2	31	49	26	54	6	26	40	28	0	6	29
20	10	58	49		10	53	15	0	2	39	50	27	27	3	27	13	7	0	6	37
21	11	31	46		11	25	55	0	2	47	51	27	59	59	27	45	47	0	6	45
22	12	4	42		11	58	34	0	2	55	52	28	32	56	28	18	27	0	6	53
23	12	37	39		12	31	14	0	3	3	53	29	5	52	28	51	7	0	7	1
24	13	10	35		13	3	54	0	3	11	54	29	38	49	29	23	46	0	7	9
25	13	43	32		13	36	34	0	3	19	55	30	11	46	29	56	26	0	7	17
26	14	16	28		14	9	13	0	3	27	56	30	44	42	30	29	6	0	7	25
27	14	49	24		14	41	53	0	3	34	57	31	17	38	31	1	46	0	7	33
28	15	22	21		15	14	33	0	3	42	58	31	50	35	31	34	25	0	7	41
29	15	55	17		15	47	13	0	3	50	59	32	23	31	32	7	5	0	7	49
30	16	28	14		16	19	52	0	3	58	60	32	56	28	32	39	45	0	7	57

Equations of the Moon.

I. For the Longitude of the Moon.

Arg. I. Mean Anomaly of the Sun.
This Equation ſerves alſo for the Node and Double of it for the mean Anomaly.

	0	I	2	3	4	5	
	+	+	+	+	+	+	
0	′ ″	′ ″	′ ″	′ ″	′ ″	′ ″	0
0	0. 0	5. 31	9. 40	11.20	9. 58	5. 49	30
1	0. 12	5. 41	9. 46	11.20	9. 52	5. 39	29
2	0. 24	5. 51	9. 52	11.20	9. 46	5. 28	28
3	0. 35	6. 1	9. 58	11.20	9. 39	5. 17	27
4	0. 47	6. 11	10. 3	11.19	9. 33	5. 6	26
5	0. 58	6. 21	10. 9	11.19	9. 26	4. 55	25
6	1. 10	6. 30	10.14	11.18	9. 19	4. 44	24
7	1. 21	6 40	10.19	11.17	9. 12	4. 33	23
8	1. 33	6. 49	10.24	11.16	9. 5	4. 22	22
9	1. 44	6. 58	10.29	11.15	8. 58	4. 11	21
10	1. 55	7. 7	10.33	11.13	8. 51	3. 59	20
11	2. 7	7. 16	10.37	11.11	8. 43	3. 48	19
12	2. 18	7. 25	10.41	11. 9	8. 35	3. 36	18
13	2. 29	7. 34	10.45	11. 7	8. 27	3. 25	17
14	2. 40	7. 42	10.49	11. 5	8. 19	3. 13	16
15	2. 51	7. 51	10.52	11. 2	8. 11	3. 1	15
16	3. 2	7. 59	10.55	10.59	8. 3	2. 50	14
17	3. 13	8. 7	10.58	10.56	7. 54	2. 38	13
18	3. 24	8. 15	11. 1	10.52	7. 45	2. 26	12
19	3. 35	8. 23	11. 3	10.49	7. 36	2. 14	11
20	3. 46	8. 31	11. 6	10.45	7. 27	2. 2	10
21	3. 57	8. 32	11. 8	10.41	7. 18	1. 50	9
22	4. 8	8. 46	11.10	10.37	7. 9	1. 38	8
23	4. 18	8. 54	11.12	10.33	7. 0	1. 26	7
24	4. 29	9. 1	11.14	10.29	6. 50	1. 14	6
25	4. 40	9. 8	11.16	10.24	6. 40	1. 1	5
26	4. 50	9. 15	11.17	10.19	6. 30	0. 49	4
27	5. 0	9. 21	11.18	10.14	6. 20	0. 37	3
28	5. 11	9. 28	11.19	10. 9	6. 9	0. 25	2
29	5. 21	9. 34	11.20	10. 4	5. 59	0. 13	1
30	5. 31	9. 40	11.20	9.58	5. 49	0. 0	0
0	—	—	—	—	—	—	0
	11	10	9	8	7	6	

II. For the Long. of the Moon.

Argum. II.
Double Diſt. ☽ a ☉ + Argum. I.

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

III For Longitude of the ☽				IV. For Longitude of the ☽				V. For Longitude of the ☽			
Argum. III. Double Dift. ☽ ☌ ☉ — Arg. I				Argum. IV. Arg. II. - Mean Anomaly ☽				Argum. V. Arg. III. — Mean Anomaly ☽			
0 —	1 —	2 —		0 +	1 +	2 +		0 +	1 +	2 +	
6 +	7 +	8 +		6 —	7 —	8 —		6 —	7 —	8 —	
° ′ ″	′ ″	′ ″	°	° ′ ″	′ ″	′ ″	°	° ′ ″	′ ″	″	°
0 0. 0	0. 31	0. 54	30	0 0. 0	0. 54	1. 34	30	0 0. 0	0. 36	1. 2	30
1 0. 1	0. 32	0. 54	29	1 0. 2	0. 56	1. 35	29	1 0. 1	0. 37	1. 3	29
2 0. 2	0. 33	0. 55	28	2 0. 4	0. 57	1. 36	28	2 0. 2	0. 38	1. 3	28
3 0. 3	0. 34	0. 55	27	3 0. 6	0. 59	1. 37	27	3 0. 4	0. 39	1. 4	27
4 0. 4	0. 35	0. 56	26	4 0. 8	1. 0	1. 38	26	4 0. 5	0. 40	1. 4	26
5 0. 6	0. 36	0. 56	25	5 0. 10	1. 2	1. 39	25	5 0. 6	0. 41	1. 5	25
6 0. 7	0. 37	0. 56	24	6 0. 12	1. 3	1. 39	24	6 0. 8	0. 42	1. 5	24
7 0. 8	0. 38	0. 57	23	7 0. 13	1. 5	1. 40	23	7 0. 9	0. 43	1. 6	23
8 0. 9	0. 38	0. 57	22	8 0. 15	1. 6	1. 41	22	8 0. 10	0. 44	1. 6	22
9 0. 10	0. 39	0. 58	21	9 0. 17	1. 8	1. 41	21	9 0. 12	0. 45	1. 7	21
10 0. 11	0. 40	0. 58	20	10 0. 19	1. 9	1. 42	20	10 0. 13	0. 46	1. 7	20
11 0. 12	0. 41	0. 58	19	11 0. 21	1. 10	1. 42	19	11 0. 14	0. 47	1. 8	19
12 0. 13	0. 42	0. 59	18	12 0. 23	1. 12	1. 43	18	12 0. 16	0. 48	1. 8	18
13 0. 14	0. 42	0. 59	17	13 0. 24	1. 13	1. 44	17	13 0. 17	0. 49	1. 9	17
14 0. 15	0. 43	1. 0	16	14 0. 26	1. 15	1. 44	16	14 0. 18	0. 50	1. 9	16
15 0. 16	0. 44	1. 0	15	15 0. 28	1. 16	1. 45	15	15 0. 19	0. 51	1. 10	15
16 0. 17	0. 45	1. 0	14	16 0. 30	1. 18	1. 45	14	16 0. 20	0. 52	1. 10	14
17 0. 18	0. 45	1. 0	13	17 0. 32	1. 19	1. 46	13	17 0. 22	0. 52	1. 10	13
18 0. 19	0. 46	1. 1	12	18 0. 33	1. 20	1. 46	12	18 0. 23	0. 53	1. 11	12
19 0. 20	0. 47	1. 1	11	19 0. 35	1. 22	1. 46	11	19 0. 24	0. 54	1. 11	11
20 0. 21	0. 48	1. 1	10	20 0. 37	1. 23	1. 47	10	20 0. 25	0. 55	1. 11	10
21 0. 22	0. 48	1. 1	9	21 0. 39	1. 24	1. 47	9	21 0. 26	0. 56	1. 11	9
22 0. 23	0. 49	1. 1	8	22 0. 41	1. 26	1. 47	8	22 0. 28	0. 56	1. 11	8
23 0. 24	0. 50	1. 1	7	23 0. 42	1. 27	1. 47	7	23 0. 29	0. 57	1. 11	7
24 0. 25	0. 50	1. 2	6	24 0. 44	1. 28	1. 47	6	24 0. 30	0. 58	1. 12	6
25 0. 26	0. 51	1. 2	5	25 0. 46	1. 29	1. 48	5	25 0. 31	0. 59	1. 12	5
26 0. 27	0. 51	1. 2	4	26 0. 47	1. 30	1. 48	4	26 0. 32	0. 59	1. 12	4
27 0. 28	0. 52	1. 2	3	27 0. 49	1. 31	1. 48	3	27 0. 33	1. 0	1. 12	3
28 0. 29	0. 52	1. 2	2	28 0. 51	1. 32	1. 48	2	28 0. 34	1. 1	1. 12	2
29 0. 30	0. 53	1. 2	1	29 0. 52	1. 33	1. 48	1	29 0. 35	1. 1	1. 12	1
30 0. 31	0. 54	1. 2	0	30 0. 54	1. 34	1. 48	0	30 0. 36	1. 2	1. 12	0
0 +	+	+	0	0 —	—	—	0	0 —	—	—	0
11	10	9		11	10	9		11	10	9	
—	—	—			+	+		+	+	+	
5	4	3		5	4	3		5	4	3	

VI. For Longitude of ☽					VII. For Longitude of ☽					VIII. For Longitude of ☽				
Argum. VI. Double Dist. ☽ *a* ☉ + Mean Anomaly ☽					Argum. VII. Double Dist. ☽ *a* ☊ — Mean Anomaly ☽					Argum. VIII. Mean Anomaly ☽ — Arg. I.				
	0 +	1 +	2 +			0 +	1 +	2 +			0 +	1 +	2 +	
	6 —	7 —	8 —			6 —	7 —	8 —			6 —	7 —	8 —	
°	′ ″	′ ″	′ ″	°	°	′	′ ″	′ ″	°	°	′ ″	′ ″	′ ″	°
0	0. 0	0. 45	1. 18	30	0	0. 0	0. 29	0. 50	30	0	0. 0	0. 20	0. 35	30
1	0. 2	0. 46	1. 19	29	1	0. 1	0. 30	0. 50	29	1	0. 1	0. 20	0. 35	29
2	0. 3	0. 48	1. 19	28	2	0. 2	0. 31	0. 51	28	2	0. 2	0. 21	0. 36	28
3	0. 5	0. 49	1. 20	27	3	0. 3	0. 31	0. 51	27	3	0. 2	0. 21	0. 36	27
4	0. 6	0. 51	1. 20	26	4	0. 4	0. 32	0. 52	26	4	0. 3	0. 22	0. 36	26
5	0. 8	0. 52	1. 21	25	5	0. 5	0. 33	0. 52	25	5	0. 4	0. 23	0. 37	25
6	0. 9	0. 53	1 22	24	6	0. 6	0. 34	0. 53	24	6	0. 4	0. 23	0. 37	24
7	0. 11	0. 55	1. 22	23	7	0. 7	0. 35	0. 53	23	7	0. 5	0. 24	0. 37	23
8	0. 13	0. 56	1. 23	22	8	0. 8	0. 35	0. 54	22	8	0. 6	0. 24	0. 37	22
9	0. 14	0. 57	1. 23	21	9	0. 9	0. 36	0. 54	21	9	0. 6	0. 25	0. 38	21
10	0. 16	0. 58	1. 24	20	10	0. 10	0. 37	0. 54	20	10	0. 7	0. 26	0. 38	20
11	0. 17	0. 59	1. 25	19	11	0. 11	0. 38	0. 55	19	11	0. 7	0. 26	0. 38	19
12	0. 19	1. 1	1. 25	18	12	0. 12	0. 38	0. 55	18	12	0. 8	0. 27	0. 38	18
13	0. 20	1. 2	1. 26	17	13	0. 13	0. 39	0. 55	17	13	0. 9	0. 27	0. 38	17
14	0. 22	1. 3	1. 26	16	14	0. 14	0. 40	0. 56	16	14	0. 9	0. 28	0. 38	16
15	0. 23	1. 4	1. 27	15	15	0. 15	0. 41	0. 56	15	15	0. 10	0. 28	0. 39	15
16	0. 25	1. 5	1. 2	14	16	0. 16	0. 41	0. 56	14	16	0 11	0. 29	0. 39	14
17	0. 26	1. 6	1. 28	13	17	0. 17	0. 42	0. 56	13	17	0. 11	0. 29	0. 39	13
18	0. 28	1. 7	1. 28	12	18	0. 18	0. 43	0. 57	12	18	0. 12	0. 30	0. 39	12
19	0. 29	1. 8	1. 28	11	19	0. 19	0. 43	0. 57	11	19	0. 13	0. 30	0. 39	11
20	0. 31	1. 9	1. 29	10	20	0. 20	0. 44	0. 57	10	20	0. 13	0. 31	0. 39	10
21	0. 32	1. 10	1. 29	9	21	0. 21	0. 45	0. 57	9	21	0. 14	0. 31	0. 39	9
22	0. 34	1. 11	1. 29	8	22	0. 22	0. 45	0. 57	8	22	0. 15	0. 32	0. 40	8
23	0. 35	1. 12	1. 29	7	23	0. 23	0. 46	0. 58	7	23	0. 15	0. 32	0. 40	7
24	0. 37	1. 13	1. 29	6	24	0. 24	0. 46	0. 58	6	24	0. 16	0. 33	0. 40	6
25	0. 38	1. 14	1. 30	5	25	0. 25	0. 47	0. 58	5	25	0. 17	0. 33	0. 40	5
26	0. 39	1. 15	1. 30	4	26	0. 26	0. 47	0. 58	4	26	0. 17	0. 34	0. 40	4
27	0. 41	1. 16	1. 30	3	27	0. 27	0. 48	0. 58	3	27	0. 18	0. 34	0. 40	3
28	0. 42	1. 16	1. 30	2	28	0. 27	0. 49	0. 58	2	28	0. 19	0. 34	0. 40	2
29	0. 44	1. 17	1. 30	1	29	0. 28	0. 49	0. 58	1	29	0. 19	0. 35	0. 40	1
30	0. 45	1. 18	1. 30	0	30	0. 29	0. 50	0. 58	0	30	0. 20	0. 35	0. 40	0
°	—	—	—	°	°	—	—	—	°	°	—	—	—	°
	11	10	9			11	10	9			11	10	9	
	+	+	+			+	+	+			+	+	+	
	5	4	3			5	4	3			5	4		

IX. For Longitude of ☽

Argum IX.
Long ☌—true Longit. ☉

	0 +	1 +	2 +	
	6 +	7 +	8 +	
°	′ ″	′ ″	′ ″	°
0	0. 0	0. 41	0. 41	30
1	0. 2	0. 41	0. 40	29
2	0. 3	0. 42	0. 39	28
3	0. 5	0. 43	0. 38	27
4	0. 6	0. 43	0. 37	26
5	0. 8	0. 44	0. 36	25
6	0. 10	0. 44	0. 35	24
7	0. 11	0. 45	0. 34	23
8	0. 13	0. 45	0. 32	22
9	0. 14	0. 46	0. 31	21
10	0. 16	0. 46	0. 30	20
11	0. 17	0. 46	0. 29	19
12	0. 19	0. 47	0. 27	18
13	0. 20	0. 47	0. 26	17
14	0. 22	0. 47	0. 25	16
15	0. 23	0. 47	0. 23	15
16	0. 25	0. 47	0. 22	14
17	0. 26	0. 47	0. 20	13
18	0. 27	0. 47	0. 19	12
19	0. 29	0. 46	0. 17	11
20	0. 30	0. 46	0. 16	10
21	0. 31	0. 46	0. 14	9
22	0. 32	0. 45	0. 13	8
23	0. 34	0. 45	0. 11	7
24	0. 35	0. 44	0. 10	6
25	0. 36	0. 44	0. 8	5
26	0. 37	0. 44	0. 6	4
27	0. 38	0. 43	0. 5	3
28	0. 39	0. 42	0. 3	2
29	0 40	0. 41	0. 2	1
30	0. 41	0. 41	0. 0	0
°	—	—	—	0
	11	10	9	
	—	—	—	
	8	7	6	

X. For Longtitude of ☽

Argum. X.
Diff. ☽ a ☉—Mean Anomaly ☽

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

X. For Longitude of ☽. Equation of the Center.

Argum. XI.
Anomaly of the Moon corrected.

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

XI. for Longitude of ☽. Equation of the Center.

Argum. XI.
Anomaly of the Moon corrected.

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

XII. For Longitude of the Moon. Evection.

Argum. XII.

Double Dift. ☽ ☌ ☉ corr.—Anom. ☽ corr.

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

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

XII. For Longitude of the Moon. Evection.

Argum. XII.

Double Dist. ☽ a ☉ corr — Anom. ☽ corr.

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

XIII. For Longitude of the Moon. Variation.

Argum. XIII.

Longitude of ☽ Equated—true Longitude of ☉

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

XIV. For Longitude of ☽ Reduction.			I. For the Latitude of the Moon.									
Argum. XIV. Longit. ☽ in Orb —Longit ☊ corr.			Argum. I. Longitude ☽ in Orbit—Longitude of ☊ corrcd.									
0. 6	1. 7	2. 8	0. N		1. N		2. N					
—	—	—	6. S		7. S		8. S					
° ′ ″	′ ″	′ ″	°	°	° ′ ″	Diff.	° ′ ″	Diff.	° ′ ″	Diff.	′	
0 0. 0	6. 2	6. 2	30	0	0. 0. 0	5. 23	2. 34. 25	4. 39	4. 27. 38	2. 40		30
1 0. 14	6. 9	5. 55	29	1	0. 5. 23	5. 23	2. 39. 4	4. 35	4. 30. 18	2. 35		29
2 0. 29	6. 15	5. 47	28	2	0. 10. 46	5. 23	2. 43. 39	4. 33	4. 32. 53	2. 29		28
3 0. 43	6. 21	5. 39	27	3	0. 16. 9	5. 23	2. 48. 12	4. 30	4. 35. 22	2. 25		27
4 0. 58	6. 27	5. 30	26	4	0. 21. 32	5. 22	2. 52. 42	4. 27	4. 37. 47	2. 20		26
5 1. 12	6. 32	5. 20	25	5	0. 26. 54	5. 22	2. 57. 9	4. 24	4. 40. 7	2. 14		25
6 1. 26	6. 37	5. 10	24	6	0. 32. 16	5. 21	3. 1. 33	4. 20	4. 42. 21	2. 9		24
7 1. 41	6. 41	5. 0	23	7	0. 37. 37	5. 21	3. 5. 53	4. 17	4. 44. 30	2. 4		23
8 1. 55	6. 45	4. 50	22	8	0. 42. 58	5. 20	3. 10. 10	4. 13	4. 46. 34	1. 59		22
9 2. 9	6. 48	4. 39	21	9	0. 48. 18	5. 19	3. 14. 23	4. 10	4. 48. 33	1. 54		21
10 2. 23	6. 51	4. 28	20	10	0. 53. 37	5. 18	3. 18. 33	4. 6	4. 50. 27	1. 48		20
11 2. 37	6. 54	4. 17	19	11	0. 58. 55	5. 16	3. 22. 39	4. 3	4. 52. 15	1. 43		19
12 2. 50	6. 56	4. 5	18	12	1. 4. 11	5. 16	3. 26. 42	3. 59	4. 53. 58	1. 38		18
13 3. 3	6. 57	3. 53	17	13	1. 9. 27	5. 15	3. 30. 41	3. 55	4. 55. 36	1. 32		17
14 3. 16	6. 57	3. 41	16	14	1. 14. 42	5. 13	3. 34. 36	3. 51	4. 57. 8	1. 27		16
15 3. 29	6. 57	3. 29	15	15	1. 19. 55	5. 11	3. 38. 27	3. 47	4. 58. 35	1. 21		15
16 3. 41	6. 57	3. 16	14	16	1. 25. 6	5. 10	3. 42. 14	3. 43	4. 59. 56	1. 16		14
17 3. 53	6. 57	3. 3	13	17	1. 30. 16	5. 8	3. 45. 57	3. 39	5. 1. 12	1. 10		13
18 4. 5	6. 56	2. 50	12	18	1. 35. 24	5. 7	3. 49. 36	3. 35	5. 2. 22	1. 4		12
19 4. 17	6. 54	2. 37	11	19	1. 40. 31	5. 5	3. 53. 11	3. 30	5. 3. 26	0. 59		11
20 4. 28	6. 51	2. 23	10	20	1. 45. 36	5. 3	3. 56. 41	3. 26	5. 4. 25	0. 54		10
21 4. 39	6. 48	2. 9	9	21	1. 50. 39	5. 1	4. 0. 7	3. 22	5. 5. 19	0. 48		9
22 4. 50	6. 45	1. 55	8	22	1. 55. 40	4. 59	4. 3. 29	3. 18	5. 6. 7	0. 43		8
23 5. 0	6. 41	1. 41	7	23	2. 0. 39	4. 57	4. 6. 47	3. 12	5. 6. 50	0. 36		7
24 5. 10	6. 37	1. 26	6	24	2. 5. 36	4. 54	4. 9. 59	3. 8	5. 7. 26	0. 31		6
25 5. 20	6. 32	1. 12	5	25	2. 10. 30	4. 52	4. 13. 7	3. 4	5. 7. 57	0. 26		5
26 5. 30	6. 27	0. 58	4	26	2. 15. 22	4. 50	4. 16. 11	2. 59	5. 8. 23	0. 20		4
27 5. 39	6. 21	0. 43	3	27	2. 20. 12	4. 47	4. 19. 10	2. 54	5. 8. 43	0. 14		3
28 5. 47	6. 15	0. 29	2	28	2. 24. 59	4. 44	4. 22. 4	2. 49	5. 8. 57	0. 8		2
29 5. 55	6. 9	0. 14	1	29	2. 29. 43	4. 42	4. 24. 53	2. 45	5. 9. 5	0. 3		1
30 6. 2	6. 2	0. 0	0	30	2. 34. 25		4. 27. 38		5. 9. 8			0
+	+	+	0	0	11. S		10. S		9. S			
11. 5	10. 4	9. 3			5. N		4. N		3. N			

II. For Latitude of ☽					I. For Equatorial Parallax of ☽							
Argum. II. Argu. IX + Argu. XIII.					Arg. Long. XI. Anomaly of ☽ correct.							
	0. N	1. N	2. N			0	1	2	3	4	5	
	5. S	7. S	8. S			Parall.	Parall	Parall.	Parall.	Parall.	Parall	
0	′ ″	′ ″	′ ″	0	0	′ ″	′ ″	′ ″	′ ″	′ ″	″	0
0	0. 0	4. 25	7. 39	30	0	54. 10	54. 30	55. 29	56. 58	58. 37	59. 56	30
1	0. 9	4. 33	7. 43	29	1	54. 10	54. 32	55. 3	57. 1	58. 4	59. 58	29
2	0. 19	4. 41	7. 48	28	2	54. 10	54. 33	55. 34	57. 5	58. 43	60. 0	28
3	0. 28	4. 49	7. 52	27	3	54. 10	54. 35	55. 37	57. 8	58. 4	60. 2	27
4	0. 37	4. 56	7. 56	26	4	54. 11	54. 36	55. 39	57. 12	58. 4	60. 4	26
5	0. 46	5. 4	8. 0	25	5	54. 11	54. 38	55. 42	57. 15	58. 52	60. 5	25
6	0. 55	5. 11	8. 4	24	6	54. 11	54. 39	55. 45	57. 19	58. 55	60. 7	24
7	1. 5	5. 19	8. 7	23	7	54. 11	54. 41	55. 47	57. 22	58. 58	60. 8	23
8	1. 14	5. 26	8. 11	22	8	54. 11	54. 42	55. 50	57. 25	59. 1	60. 10	22
9	1. 23	5. 34	8. 14	21	9	54. 12	54. 44	55. 53	57. 29	59. 4	60. 11	21
10	1. 32	5. 41	8. 18	20	10	54. 12	54. 46	55. 56	57. 32	59. 7	60. 13	20
11	1. 41	5. 48	8. 21	19	11	54. 12	54. 48	55. 59	57. 35	59. 10	60. 14	19
12	1. 50	5. 55	8. 24	18	12	54. 13	54. 49	56. 2	57. 38	59. 13	60. 15	18
13	1. 59	6. 2	8. 27	17	13	54. 13	54. 51	56. 5	57. 42	59. 16	60. 16	17
14	2. 8	6. 9	8. 30	16	14	54. 14	54. 53	56. 8	57. 45	59. 18	60. 17	16
15	2. 17	6. 15	8. 32	15	15	54. 15	54. 55	56. 11	57. 48	59. 21	60. 18	15
16	2. 26	6. 22	8. 34	14	16	54. 15	54. 57	56. 14	57. 51	59. 23	60. 18	14
17	2. 35	6. 28	8. 36	13	17	54. 16	54. 59	56. 17	57. 55	59. 26	60. 19	13
18	2. 44	6. 34	8. 38	12	18	54. 17	55. 1	56. 20	57. 58	59. 29	60. 20	12
19	2. 52	6. 40	8. 40	11	19	54. 18	55. 3	56. 23	58. 1	59. 31	60. 21	11
20	3. 1	6. 46	8. 42	10	20	54. 19	55. 5	56. 26	58. 4	59. 34	60. 22	10
21	3. 10	6. 52	8. 43	9	21	54. 20	55. 7	56. 29	58. 8	59. 36	60. 22	9
22	3. 18	6. 57	8. 45	8	22	54. 21	55. 9	56. 32	58. 11	59. 39	60. 23	8
23	3. 27	7. 3	8. 46	7	23	54. 22	55. 12	56. 36	58. 14	59. 41	60. 24	7
24	3. 35	7. 8	8. 47	6	24	54. 23	55. 14	56. 39	58. 18	59. 44	60. 25	6
25	3. 44	7. 14	8. 48	5	25	54. 24	55. 17	56. 42	58. 21	59. 46	60. 25	5
26	3. 52	7. 19	8. 48	4	26	54. 25	55. 19	56. 45	58. 24	59. 48	60. 26	4
27	4. 1	7. 24	8. 49	3	27	54. 26	55. 22	56. 49	58. 28	59. 50	60. 26	3
28	4. 9	7. 29	8. 49	2	28	54. 28	55. 24	56. 52	58. 31	59. 52	60. 26	2
29	4. 17	7. 34	8. 50	1	29	54. 29	55. 27	56. 55	58. 34	59. 54	60. 26	1
30	4. 25	7. 39	8. 50	0	30	54. 30	55. 29	56. 58	58. 37	59. 56	60. 26	0
0	11. S	10. S	9. S	0	0	Parall.	Parall.	Parall.	Parall	Parall.	Parall.	0
	5. N	4. N	3. N			11	10	9	8	7	6	

II. For Parallax of the ☽

Arg. Long. XII.
Double Dift. ☽ a ☉ correct — Anom. ☽ corr.

0	1	2	
6	7	8	
+	+	+	
0	"	"	"	0
0	38	33	19	30
1	38	32	18	29
2	38	32	18	28
3	38	32	17	27
4	38	31	17	26
5	38	31	16	25
6	38	31	16	24
7	37	30	15	23
8	37	30	14	22
9	37	30	14	21
10	37	29	13	20
11	37	29	13	19
12	37	28	12	18
13	37	28	11	17
14	36	28	11	16
15	36	27	10	15
16	36	27	9	14
17	36	26	9	13
18	36	26	8	12
19	35	25	7	11
20	35	25	6	10
21	35	24	6	9
22	35	24	5	8
23	34	23	4	7
24	34	23	4	6
25	34	22	3	5
26	34	21	3	4
27	33	21	2	3
28	33	20	1	2
29	33	20	1	1
30	33	19	0	0
0	11	10	9	
	+	+	+	
	5	4	3	

III. For Equator Parallax of the ☽

Arg. Long. XIII.
Longitude ☽ Equated — true Longitude ☉

0	1	2	3	+	5	
+	±	—	—	∓	+	
0	″	″	″	″	″	0
0	25	12	14	27	13	14	30
1	25	12	14	27	12	14	29
2	25	11	15	27	12	15	28
3	25	10	16	27	11	16	27
4	25	9	16	27	10	17	26
5	25	8	17	27	9	18	25
6	25	8	18	27	8	18	24
7	24	7	18	26	7	19	23
8	24	6	19	26	6	20	22
9	24	5	20	26	5	20	21
10	24	4	21	25	4	21	20
11	24	3	21	25	3	22	19
12	23	2	22	24	2	22	18
13	23	1	23	24	1	23	17
14	23	0	23	23	0	23	16
15	23	1	24	23	1	24	15
16	22	1	24	22	2	24	14
17	22	2	25	22	3	25	13
18	21	3	25	21	4	25	12
19	20	4	25	21	5	25	11
20	19	5	26	20	6	26	10
21	19	6	26	19	7	26	9
22	18	7	26	19	7	26	8
23	17	8	26	18	8	26	7
24	17	9	26	17	9	27	6
25	16	10	27	16	10	27	5
26	15	10	27	16	11	27	4
27	15	11	27	15	11	28	3
28	14	12	27	14	12	28	2
29	13	13	27	13	13	28	1
30	12	14	27	13	14	28	0
0	+	±	—	—	∓	+	
	—	—	—	—	—	—	
	11	10	9	8	7	6	

To find the ☽'s Horizontal Semidiameter from the Equat. Paral.

Parall.	*Semidi.*	*Parall.*	*Semidi.*
′ ″	′ ″	′ ″	′ ″
53. 10	14. 30	57. 23	15. 39
53. 21	14. 33	57. 34	15. 42
53. 32	14. 36	57. 45	15. 45
53. 43	14. 39	57. 56	15. 48
53. 54	14. 42	58. 7	15. 51
54. 5	14. 45	58. 18	15. 54
54. 16	14. 48	58. 29	15. 57
54. 27	14. 51	58. 40	16. 0
54. 38	14. 54	58. 51	16. 3
54. 49	14. 57	59. 2	16. 6
55. 0	15. 0	59. 13	16. 9
55. 11	15. 3	59. 24	16. 12
55. 22	15. 6	59. 35	16. 15
55. 33	15. 9	59. 46	16. 18
55. 44	15. 12	59. 57	16. 21
55. 55	15. 15	60. 8	16. 24
56. 6	15. 18	60. 19	16. 27
56. 17	15. 21	60. 30	16. 30
56. 28	15. 24	60. 41	16. 33
56. 39	15. 27	60. 52	16. 36
56. 50	15. 30	61. 3	16. 39
57. 1	15. 33	61. 14	16. 42
57. 12	15. 36	61. 25	16. 45

Increase of the ☽'s Semidiameter for different Altit.

Appt. Altit. ☽	Incre. of ☽'s Semi.	Appt. Altit. ☽	Incre. of ☽'s Semi.
°	″	°	″
0	0	50	12
5	1	55	13
10	3	60	14
15	4		
20	6	65	15
25	7	70	15
30	8	75	16
35	9	80	16
40	10	85	16
45	11	90	16

I. For the hourly Motion of the Moon in Orbit.

Argum. Long. XI.

Anomaly of ☽ correct.

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

II. For hourly Motion of ☽

Arg. Lon. XII.
Double Dist. ☽ a ☉ corr. — Anoma. ☽ corr.

°	0	1	2	°
	—	—	·	
	6	7	8	
	+	+	+	
	″	′	″	
0	38	33	19	30
1	38	32	18	29
2	38	32	18	28
3	38	32	17	27
4	38	31	17	26
5	38	31	16	25
6	38	31	16	24
7	37	30	15	23
8	37	30	14	22
9	37	30	14	21
10	37	29	13	20
11	37	29	13	19
12	37	28	12	18
13	37	28	11	17
14	36	28	11	16
15	36	27	10	15
16	36	27	9	14
17	36	26	9	13
18	36	26	8	12
19	35	25	7	11
20	35	25	6	10
21	35	24	6	9
22	35	24	5	8
23	34	23	4	7
24	34	23	4	6
25	34	22	3	5
26	34	21	3	4
27	33	21	2	3
28	33	20	1	2
29	33	20	1	1
30	33	19	0	0
	—	—	—	0
	11	10	9	
	+	+	+	
	5	+	3	

III. For hourly Mot. of ☽

Argum. III.
Mean Dist. of ☉ & ☽.

S	0	1	2	3	4	5
S	6	7	8	9	10	11
—	—	—	—	—	—	—
	+	+	—	—	+	+
—	—	—	—	—	—	—
°	′	″	″	″	″	″
0	42	21	21	42	21	21
1	42	20	22	42	20	22
2	42	18	24	42	18	24
3	42	17	24	42	17	24
4	42	15	26	42	15	26
5	42	14	27	42	14	27
6	42	13	28	42	13	28
7	41	11	29	41	11	29
8	41	10	30	41	10	30
9	40	8	31	40	8	31
10	40	7	32	40	7	32
11	39	5	33	39	5	33
12	39	4	34	39	4	34
13	38	2	35	38	2	35
14	37	1	36	37	1	36
15	36	0	36	36	0	36
		—			+	
16	36	1	37	36	1	37
17	35	3	38	35	3	38
18	34	5	39	34	5	39
19	33	6	39	33	6	39
20	32	8	40	32	8	40
21	31	9	40	31	9	40
22	30	10	41	30	10	41
23	29	12	41	29	12	41
24	28	13	42	28	13	42
25	27	14	42	27	14	42
26	26	15	42	26	15	42
27	24	17	42	24	17	42
28	24	18	42	24	18	42
29	22	20	42	22	20	42
30	21	21	42	21	21	42

A Table of the Multipliers of the Difference between the Moon's Longitude computed, and that inferred from Observation; to find the Error of the Ship's Account in Longitude.

Enter with hourly Motion of ☽, or difference of hourly Motions of ☉ & ☽, according as ☽'s distance is taken from a Star or the Sun.

Ho. Mo. ☽ or diffe. Ho Mot. ☉a☽.	Multipliers.	Ho. Mot. ☽ or diffe. Ho. Mot. ☉a☽.	Multipliers.
′ ″		′ ″	
25. 45	35,0	32. 0	28,1
26. 0	34,6	32. 15	27,9
26. 15	34,3	32. 30	27,7
26. 30	34,0	32. 45	27,5
26. 45	33,6	33. 0	27,3
27. 0	33,3	33. 15	27,1
27. 15	33,0	33. 30	26,9
27. 30	32,7	33. 45	26,7
27. 45	32,4	34. 0	26,5
28. 0	32,1	34. 15	26,3
28. 15	31,8	34. 30	26,1
28. 30	31,6	34. 45	25,9
28. 45	31,3	35. 0	25,7
29. 0	31,0	35. 15	25,5
29. 15	30,8	35. 30	25,3
29. 30	30,5	35. 45	25,2
29. 45	30,2	36. 0	25,0
30. 0	30,0	36. 15	24,8
30. 15	29,7	36. 30	24,7
30. 30	29,5	36. 45	24,5
30. 45	29,3	37. 0	24,3
31. 0	29,0	37. 15	24,2
31. 15	28,8	37. 30	24,0
31. 30	28,6	37. 45	23,8
31. 45	28,3	38. 0	23,7

A Table of the Declination of the Degrees of the Ecliptic.

	0 N	1 N	2 N	
	6 S	7 S	8 S	
☉	° ′	° ′	° ′	°
0	0. 0	11. 29	20. 11	30
1	0. 24	11. 50	20. 23	29
2	0. 48	12. 11	20. 35	28
3	1. 12	12. 32	20. 47	27
4	1. 35	12. 52	20. 59	26
5	1. 59	13. 12	21. 10	25
6	2. 23	13. 32	21. 20	24
7	2. 47	13. 52	21. 30	23
8	3. 11	14. 12	21. 40	22
9	3. 34	14. 31	21. 50	21
10	3. 58	14. 50	21. 59	20
11	4. 21	15. 9	22. 7	19
12	4. 45	15. 27	22. 16	18
13	5. 8	15. 46	22. 23	17
14	5. 32	16. 4	22. 31	16
15	5. 55	16. 21	22. 38	15
16	6. 18	16. 39	22. 44	14
17	6. 41	16. 56	22. 50	13
18	7. 4	17. 13	22. 56	12
19	7. 27	17. 30	23. 1	11
20	7. 50	17. 46	23. 6	10
21	8. 12	18. 2	23. 10	9
22	8. 35	18. 17	23. 14	8
23	8. 57	18. 33	23. 17	7
24	9. 19	18. 48	23. 20	6
25	9. 41	19. 2	23. 23	5
26	10. 3	19. 17	23. 25	4
27	10. 25	19. 31	23. 26	3
28	10. 46	19. 44	23. 27	2
29	11. 8	19. 58	23. 28	1
30	11. 29	20. 11	23. 28	0
	5 N	4 N	3. N	0
	11 S	10 S	9. S	

A Table of the Moon's Parallax in Altitude.

☽'s Ap. Altit.	Horizontal Parallax of ☽.									
°	′ 53	′ 54	′ 55	′ 56	′ 57	′ 58	′ 59	′ 60	′ 61	′ 62
0	53	54	55	56	57	58	59	60	61	62
9	52	53	54	55	56	57	58	59	60	61
12	52	53	54	55	56	57	58	59	60	61
15	51	52	53	54	55	56	57	58	59	60
18	50	51	52	53	54	55	56	57	58	59
21	49	50	51	52	53	54	55	56	57	58
24	48	49	50	51	52	53	54	55	56	57
27	47	48	49	50	51	52	52	53	54	55
30	46	47	48	48	49	50	51	52	53	54
33	44	45	46	47	48	48	49	50	51	52
36	43	44	44	45	46	47	48	48	49	50
39	41	42	43	43	44	45	45	46	47	48
42	39	40	41	41	42	43	44	44	45	46
45	37	38	39	39	40	41	42	42	44	44
48	35	36	37	37	38	39	39	40	41	41
51	33	34	35	35	36	36	37	38	38	39
54	31	32	32	33	33	34	35	35	36	36
57	29	29	30	30	31	32	32	33	33	34
60	27	27	27	28	28	29	29	30	30	31
63	24	24	25	25	26	26	27	27	28	28
66	21	22	22	23	23	23	24	24	25	25
69	19	19	20	20	20	21	21	21	22	22
72	16	17	17	17	18	18	18	18	19	19
75	13	14	14	14	15	15	15	15	16	16
78	11	11	11	11	11	11	12	12	13	13
81	8	8	8	9	9	9	9	9	10	10
84	5	6	6	6	6	6	6	6	6	6
87	3	3	3	3	3	3	3	3	3	3
90	0	0	0	0	0	0	0	0	0	0

A Table of the right Aſcenſion of the Degrees of the Ecliptic.

	0	1	2	3	4	5
°	° ′	° ′	° ′	° ′	° ′	° ′
0	0. 0	27. 54	57. 49	90. 0	122. 11	152. 6
1	0. 55	28. 51	58. 51	91. 5	123. 14	153. 3
2	1. 50	29. 49	59. 54	92. 11	124. 16	154. 0
3	2. 45	30. 47	60. 57	93. 16	125. 18	154. 57
4	3. 40	31. 45	62. 0	94. 21	126. 20	155. 54
5	4. 35	32. 43	63. 3	95. 27	127. 21	156. 50
6	5. 30	33. 41	64. 6	96. 32	128. 23	157. 47
7	6. 26	34. 39	65. 10	97. 37	129. 24	158. 44
8	7. 21	35. 38	66. 14	98. 43	130. 25	159. 40
9	8. 16	36. 36	67. 17	99. 48	131. 26	160. 36
10	9. 11	37. 35	68. 21	100. 53	132. 27	161. 32
11	10. 7	38. 34	69. 25	101. 58	133. 28	162. 28
12	11. 2	39. 33	70. 30	103. 3	134. 28	163. 24
13	11. 57	40. 32	71. 34	104. 8	135. 28	164. 20
14	12. 53	41. 32	72. 38	105. 12	136. 28	165. 16
15	13. 49	42. 32	73. 43	106. 17	137. 28	166. 11
16	14. 44	43. 31	74. 48	107. 22	138. 28	167. 7
17	15. 40	44. 31	75. 52	108. 26	139. 28	168. 3
18	16. 36	45. 32	76. 57	109. 30	140. 27	168. 58
19	17. 32	46. 32	78. 2	110. 35	141. 26	169. 53
20	18. 28	47. 33	79. 7	111. 39	142. 25	170. 49
21	19. 24	48. 34	80. 12	112. 42	143. 24	171. 44
22	20. 20	49. 34	81. 17	113. 46	144. 22	172. 39
23	21. 16	50. 36	82. 23	114. 50	145. 21	173. 34
24	22. 13	51. 37	83. 28	115. 53	146. 19	174. 29
25	23. 9	52. 38	84. 33	116. 57	147. 17	175. 25
26	24. 6	53. 40	85. 38	118. 0	148. 15	176. 20
27	25. 3	54. 42	86. 44	119. 3	149. 13	177. 15
28	26. 0	55. 44	87. 49	120. 6	150. 11	178. 10
29	26. 57	56. 46	88. 55	121. 9	151. 8	179. 5
30	27. 54	57. 49	90. 0	122. 11	152. 6	180. 0

Sequel of the Table of the right Aſcenſion of the Degrees of the Ecliptic.

	6	7	8	9	10	11
0	0 ′	0 ′	0 ′	0 ′	0 ′	0 ′
0	180. 0	207. 54	237. 49	270. 0	302. 11	332. 6
1	180. 55	208. 51	238. 51	271. 5	303. 14	333. 3
2	181. 50	209. 49	239. 54	272. 11	304. 16	334. 0
3	182. 45	210. 47	240. 57	273. 16	305. 18	334. 57
4	183. 40	211. 44	242. 0	274. 21	306. 20	335. 54
5	184. 35	212. 42	243. 3	275. 27	307. 21	336. 51
6	185. 30	213. 41	244. 6	276. 32	308. 23	337. 47
7	186. 25	214. 39	245. 10	277. 38	309. 24	338. 44
8	187. 21	215. 37	246. 14	278. 43	310. 26	339. 40
9	188. 16	216. 36	247. 17	279. 48	311. 27	340. 36
10	189. 11	217. 35	248. 21	280. 53	312. 27	341. 32
11	190. 6	218. 34	249. 25	281. 58	313. 28	342. 28
12	191. 2	219. 33	250. 30	283. 3	314. 28	343. 24
13	191. 57	220. 32	251. 34	284. 8	315. 29	344. 20
14	192. 53	221. 32	252. 38	285. 13	316. 29	345. 16
15	193. 48	222. 32	253. 43	286. 17	317. 28	346. 12
16	194. 44	223. 31	254. 48	287. 22	318. 28	347. 7
17	195. 40	224. 32	255. 52	288. 26	319. 27	348. 3
18	196. 36	225. 32	256. 57	289. 30	320. 27	348. 58
19	197. 31	226. 32	258. 2	290. 35	321. 26	349. 53
20	198. 27	227. 33	259. 7	291. 39	322. 25	350. 49
21	199. 24	228. 34	260. 12	292. 43	323. 24	351. 44
22	200. 20	229. 35	261. 17	293. 46	324. 23	352. 39
23	201. 16	230. 36	262. 23	294. 50	325. 21	353. 34
24	202. 13	231. 37	263. 28	295. 54	326. 19	354. 30
25	203. 9	232. 38	264. 33	296. 57	327. 17	35[illegible] 25
26	204. 6	233. 40	265. 38	298. 0	328. [illegible]5	35[illegible] 20
27	205. 3	234. 42	266. 44	299. 3	329. 13	3[illegible] 15
28	206. 0	235. 44	267. 49	300. 6	330. 11	3[illegible] 10
29	206. 57	236. 45	268. 55	301. 9	331. 8	3[illegible] 5
30	207. 54	237. 49	270. 0	302. 11	332. 6	3[illegible] 0

A TABLE

Containing the Longitudes of Places that have been determined by Aſtronomical Obſervations, reckoned from the Meridian of the Royal Obſervatory at *Greenwich*; and alſo their Latitudes.

Names of Places.	Continent.	Country.	Coaſt or Province.	Latitude.	Longitude.	
					In Degrees.	In Time.
				° ′ ″	° ′ ″	H. M. S
Abbeville	Eur.	France	Picardy	50 7 1 N	1 49 45 E	0 7 19
Abo	Eur.	Finland	Baltic Sea	60 27 10 N	22 13 30 E	1 28 54
Achem	Aſ.	N. W. Pt. Iſl. Sumatra	Indian Ocean	5 22 N	95 34 E	6 22 16
Agra	Aſ.	India	Moguls	26 43 0 N	76 44 0 E	5 6 56
Aix	Eur.	France	Provence	43 31 35 N	5 26 15 E	0 21 45
Alby	Eur.	France	Languedoc	43 55 44 N	2 31 15 E	0 10 5
Alexandretta	Aſ.	Syria	Mediter. Sea	36 35 10 N	36 20 0 E	2 25 20
Alexandria	Aſ.	Ægypt	Mediter. Sea	31 11 20 N	30 16 30 E	2 1 6
Amiens	Eur.	France	Picardy	49 53 38 N	2 18 0 E	0 9 12
Ancona	Eur.	Italy	Mediter. Sea	43 37 54 N	13 30 30 E	0 54 2
Angers	Eur.	France	Orleanois	47 28 8 N	0 33 45 W	0 2 15
Angoulême	Eur.	France	Orleanois	45 39 3 N	0 8 45 E	0 0 35
Antibes	Eur.	France	Mediter. Sea	43 34 50 N	7 8 30 E	0 28 34
Antwerp	Eur.	Flanders	River Scheld	51 13 15 N	4 24 15 E	0 17 37
Archangel	Eur.	Ruſſia	White Sea	64 34 0 N	38 5 50 E	2 35 40
Arica	Am.	Peru	South Sea	18 26 38 S	71 11 0 W	4 44 44
Arles	Eur.	France	Provence	43 40 33 N	4 38 0 E	0 18 32
Iſl. of Aſcenſion	Aſ.	Angola	S. Atl. Ocean	7 57 0 S	13 59 0 W	0 55 56
Athens	Eur.	Turkey	Archipelago	38 5 0 N	23 52 30 E	1 35 30
Auch	Eur.	France	Gaſcony	43 38 46 N	0 30 0 E	0 2 0
Aurillac	Eur.	France	Lionois	44 55 10 N	2 27 0 E	0 9 48
Auxerre	Eur.	France	Burgundy	47 47 54 N	3 34 15 E	0 14 17
Avignon	Eur.	France	Provence	43 57 25 N	4 48 30 E	0 19 14
Avranches	Eur.	France	Normandy	48 41 18 N	1 22 45 W	0 5 31
Antic. Babylon	Aſ.	Meſopotamia	Riv. Euphrates	33 0 0 N	42 46 30 E	2 51 6
Bagdad	Aſ.	Meſopotamia		33 21 0 N	43 46 30 E	2 55 6
Balaſore	Aſ.	India	Bay Bergal	21 20 0 N	86 0 0 E	5 44 0
Bayeux	Eur.	France	Normandy	49 16 30 N	0 42 45 W	0 2 51
Bayonne	Eur.	France	Bay Biſcay	43 29 21 N	1 32 0 W	0 6 0
Great Bear Iſl.	Am.		Hudſon's Bay	54 34 N	79 56 0 W	5 19 44
Beauvais	Eur.	France	Iſl. of France	49 26 2 N	2 4 45 E	0 8 19
Berlin	Eur.	Germany	River Elbe	52 32 30 N	13 26 15 E	0 53 45
Beſançon	Eur.	France	France Compte	47 13 45 N	6 2 30 E	0 24 10
Beziers	Eur.	France	Languedoc	43 20 41 N	3 12 30 E	0 12 50
Cape Blanco	Am.	Patagonia	Atl. Ocean	47 20 S	70 5 0 W	4 40 20

Names of Places.	Continue.	Country.	Coaſt or Province.	Latitude.	Longitude.	
					In Degrees.	In Time.
				° ′ ″	° ′ ″	H. M. S.
Bologna S. Petr.	Eur.	Italy	Romania	44 29 36 N	11 21 15 E	0 45 25
Boſton	Am.	New England	Atl. Ocean	42 25 0 N	70 37 15 W	4 42 29
Boulogne	Eur.	France	Eng. Channel	50 43 31 N	1 36 45 E	0 6 27
Iſl. of Bourbon St. Dennis	Af.	Madagaſcar	Ind. Ocean	20 51 43 S	55 30 0 E	3 42 0
Bourdeaux	Eur.	France	River Garonne	44 50 18 N	0 34 45 W	0 2 19
Breſlaw	Eur.	Sileſia	River Oder	51 3 0 N	17 8 45 E	1 8 35
Breſt	Eur.	France	Atl. Ocean	48 23 0 N	4 30 45 W	0 18 3
St. Brieux	Eur.	France	Eng. Channel	48 31 21 N	2 43 15 W	0 10 53
Bruſſels	Eur.	Netherlands	Brabant	50 51 0 N	4 21 45 E	0 17 27
Buenos Ayres	Am.	Braſil	Atl. Ocean	34 35 26 S	58 31 15 W	3 54 5
Porto Cabello	Am.	Terra Firma	Caracos	10 30 50 N	67 32 0 W	4 30 8
Cadiz	Eur.	Spain	Atl. Ocean	36 31 7 N	6 1 15 W	0 24 5
Caen	Eur.	France	Eng. Channel	49 11 10 N	0 21 45 W	0 1 27
Cairo	Af.	Ægypt	River Nile	30 2 30 N	31 26 15 E	2 5 45
Cajaneburg	Eur.	Sweden	Finland	64 13 30 N	27 43 15 E	1 50 53
Calais	Eur.	France	Eng. Channel	50 57 31 N	1 51 0 E	0 7 24
F. Wil. Calcutta	Af.	India	Bengal	22 36 N	88 25 45 E	5 53 43
Callao	Am.	Peru	South Sea	12 1 53 S	76 58 0 W	5 7 52
Calmar	Eur.	Sweden	Baltic Sea	56 40 30 N	16 21 45 E	1 5 27
Cambray	Eur.	Netherlands	Cambreſis	50 10 30 N	3 13 45 E	0 12 55
Cambridge	Eur.	England	Cambridge-ſhi.	52 17 N	0 5 45 E	0 0 23
Iſl. of Candia	Eur.	Turkey	Medit. Sea	35 18 35 N	25 18 0 E	1 41 12
Canton	Af.	China	South Ocean	23 7 30 N	113 2 0 E	7 32 8
Carleſcroon	Eur.	Sweden	Baltic Sea	56 20 N	15 26 15 E	1 1 45
Carthagena	Am.	Terra Firma	Carib. Sea	10 26 35 N	75 26 15 W	5 1 45
Caſan	Eur.	Ruſſia	Caſan	55 44 N	49 30 0 E	3 18 0
Caſtres	Eur.	France	Languedoc	43 37 10 N	2 14 45 E	0 8 59
St. Catherine Iſ.	Am.	Plata	Atl. Ocean	27 35 S	49 17 W	3 17 8
Cayenne	Am.	Iſl. Cayenne	Atl. Ocean	4 56 0 N	52 15 0 W	3 29 0
Châlons	Eur.	France	River Marne	48 57 12 N	4 22 15 E	0 17 29
Challon	Eur.	France	River Saone	46 46 50 N	4 51 30 E	0 19 26
Chandernagor	Af.	India	Bengal	22 51 26 N	88 29 15 E	5 53 57
Charlton Iſland	Am.	New Wales	Hudſon's Bay	52 3 N	80 10 W	5 20 40
Chartres	Eur.	France	Orleanois	48 26 49 N	1 29 0 E	0 5 56
Cherburg	Eur.	France	Eng. Channel	49 38 26 N	1 38 15 W	0 6 33
Churchill River Pr. Wales Ft.	Am.	New Wales	Hudſon's Bay	58 56 N	94 55 W	6 19 40
Civita Vechia	Eur.	Italy	Mediter. Sea	42 5 24 N	11 46 15 E	0 47 5
Cape Clear	Eur.	Ireland	Weſt Ocean	51 18 N	11 15 0 W	0 45 0
Clermont	Eur.	France	Lionois	45 46 45 N	3 5 0 E	0 12 20
Cape Comorin	Af.	India	Ind. Ocean	7 56 N	78 5 E	5 12 20

Names of Places.	Continent.	Country.	Coaſt or Province.	Latitude.	Longitude.	
					In Degrees.	In Time.
				° ′ ″	° ′ ″	H. M. S.
Conception	Am.	Chili	South Sea	36 42 53 S	72 40 0 W	4 50 40
Iſl. Pulo Condor	Aſ.	Gulf Siam	Ind. Ocean	8 40 N	107 20 E	7 9 20
Conſtantinople	Eur.	Turkey	Archipelago	41 0 0 N	28 53 30 E	1 55 34
Copenhagen	Eur.	Denmark	Baltic Sea	55 40 45 N	12 45 15 E	0 51 1
Coquimbo	Am.	Chili	South Ocean	29 54 26 S	71 15 45 W	4 45 3
Coutances	Eur.	France	Eng. Channel	49 2 50 N	1 27 30 W	0 5 50
Iſl. of Cummin	Aſ.	China	China Ocean	31 40 0 N	121 4 E	8 4 16
Dantzic	Eur.	Poland	Baltic Sea	54 22 0 N	18 31 E	1 14 4
Dax	Eur.	France	River Adour	43 42 23 N	1 4 W	0 4 16
Dieppe	Eur.	France	Eng. Channel	49 55 17 N	1 4 15 E	0 4 17
Dijon	Eur.	France	Burgundy	47 19 22 N	5 2 30 E	0 20 10
Dol	Eur.	France	Britany	48 33 9 N	1 46 15 W	0 7 5
Drontheim	Eur.	Norway	North Ocean	63 26 16 N	11 3 45 E	0 44 15
Dunkirk	Eur.	France	Eng. Channel	51 2 4 N	2 22 30 E	0 9 30
Edinburgh	Eur.	Scotland	German Ocean	55 57 57 N	3 18 16 W	0 13 13
Embrun	Eur.	France	Dauphiny	44 34 0 N	6 29 0 E	0 25 56
Erzerom	Aſ.	Armenia		39 56 35 N	48 35 45 E	3 14 23
Evereux	Eur.	France	Normandy	49 1 24 N	1 8 45 E	0 4 35
Exeter	Eur.	England	Devonſhire	50 44 N	3 34 30 W	0 14 18
Falmouth	Eur.	England	Eng. Channel	50 8 N	5 28 20 W	0 21 53
Ferrara	Eur.	Italy	River Po	44 54 0 N	11 36 15 E	0 46 25
Iſl. of Ferro, at the Town	Aſ.	Canaries	Atl. Ocean	27 47 20 N	17 33 45 W	1 10 15
Florence	Eur.	Italy	River Arno	43 46 30 N	11 2 0 E	0 44 8
St. Flour	Eur.	France	Lionois	45 1 55 N	3 5 30 E	0 12 22
Ca. St. Françeis	Am.	Hiſpaniola	Atl. Ocean	19 40 N	71 40 W	4 46 40
Frawenburgh	Eur.	Pruſſia	Baltic Sea	54 22 15 N	20 7 30 E	1 20 30
Frejus	Eur.	France	Mediter. Sea	43 26 3 N	6 44 45 E	0 26 59
Strs. of Fronſac, narroweſt Part oppoſ. a high Mountain towards the Continent	Am.	Nova Scotia	Iſl. Cape Breton	45 39 N	61 20 W	4 5 20
Geneva	Eur.	Savoy	River Rhone	46 12 0 N	6 35 0 E	0 26 20
Genoa	Eur.	Italy	Mediter. Sea	44 25 0 N	8 35 45 E	0 34 23
Fort St. Georg.	Aſ.	India	Bay Bengal	13 13 N	80 2 15 E	5 20 9
Ghent	Eur.	Netherlands	Flanders	51 3 0 N	3 43 45 E	0 14 55
Goa	Aſ.	India	Arab. Sea	15 31 0 N	73 45 0 E	4 55 0
Ca. Good-Hope	Aſ.	Caffers	Indian Ocean	33 55 42 S	18 23 15 E	1 13 33
Gottenburg	Eur.	Sweden	Sound	57 42 0 N	11 38 45 E	0 46 35
Gottingen, Obſ.	Eur.	Germany	Brunſwic	51 31 - N	9 54 0 E	0 39 36
Granville	Eur.	France	Eng. Channel	48 50 11 N	1 37 0 W	0 6 28
Graſſe	Eur.	France	Provence	43 39 25 N	6 56 0 E	0 27 44
R. Obſ. Greenw.	Eur.	England	Kent	51 28 40 N	0 0 0	0 0 0
Grenoble	Eur.	France	Dauphine	45 11 - N	5 43 0 E	0 22 52

Names of Places.	Con-tine.	Country.	Coaſt or Province.	Latitude.	Longitude.	
					In Degrees.	In Time.
				° ′ ″	° ′ ″	H. M. S.
Guiquil	Am.	Peru	South Sea	2 11 21 S	81 11 30 W	5 24 46
Hague	Eur.	Netherlands	Holland	52 4 10 N	4 17 30 E	0 17 10
Havana	Am.	Ild. Cuba	Atl. Ocean	23 11 52 N	82 18 30 W	5 29 14
Ild. St. Helena, James's Fort	Af.	Benguela	Atl. Ocean	15 55 S	5 49 0 W	0 23 16
Hernoſand	Eur.	Sweden	Gulf Bothnia	62 38 N	17 53 0 E	1 11 32
Hoai-Nghim	Af.	China	Kyangnan	33 34 40 N	118 49 30 E	7 55 18
Fort Royal, Ild of Jamaica	Am.	Weſt Indies	Atl. Ocean	18 0 N	76 45 30 W	5 7 2
Rio Janeiro	Am.	Braſil	Atl. Ocean	22 54 10 S	42 45 0 W	2 51 0
Jeruſalem	Af.	Paleſtine	Inland	31 55 0 N	35 20 0 E	2 21 20
Ingolſtadt	Eur.	Germany	River Danube	48 46 0 N	11 22 30 E	0 45 30
St. John's Fort	Am.	Newfoundland	Atl. Ocean	47 32 N	52 48 15 W	3 31 13
Illmabad	Af.	India		22 20 N	91 45 E	6 7 0
Port St. Julian	Am.	Patagonia	S. Atl. Ocean	49 10 N	68 44 W	4 34 56
Juthia	Af.	India	Capit. Siam	14 18 N	100 50 0 E	6 43 20
Landau	Eur.	Germany	Alſace	49 11 40 N	8 7 30 E	0 32 30
Landſcroon	Eur.	Sweden	Sound	55 52 N	12 46 45 E	0 51 7
Lauſance	Eur.	Switzerland	Lake Geneva	46 31 5 N	6 45 15 E	0 27 1
Leſtoure	Eur.	France	Gaſcony	43 56 2 N	0 37 0 E	0 2 28
Leipſic	Eur.	Germany	Saxony	51 19 14 N	12 20 0 E	0 49 20
Lelkeard	Eur.	En land	Cornwall	50 26 55 N	4 41 45 W	0 18 47
Leyden	Eur.	Netherlands	Holland	52 10 N	4 27 30 E	0 17 50
Liſle	Eur.	Netherlands		50 37 50 N	3 4 15 E	0 12 17
Lima	Am.	Peru	South Sea	12 1 15 S	76 49 30 W	5 7 18
Liſbon, Congr. Oratot	Eur.	Portugal	River Tagus	38 42 20 N	9 7 30 W	0 36 0
Lizard	Eur.	England	Eng. Channel	49 57 N	5 43 W	0 22 52
London, at St. Paul's	Eur.	England	Middleſex	51 30 40 N	0 5 37 W	0 0 22
Cape Lorenſo	Am.	Peru	South Sea	1 2 S	80 17 W	5 21 8
Port St. Louis	Am.	Hiſpaniola	Atl. Ocean	18 19 0 N	73 6 0 W	4 52 24
Louiſbourg	Am.	Cape Breton	Atl. Ocean	45 53 45 N	59 55 0 W	3 59 40
Louveau	Af.	India	Kingd. Siam	12 42 30	101 1 30 E	6 44 6
Lucon	Eur.	France	Orleanois	46 27 14 N	1 10 30 W	0 4 42
Lunden	Eur.	Sweden	Schonen	55 41 30 N	13 21 15 E	0 53 25
Lyons	Eur.	France	Lionois	45 45 51 N	4 49 45 E	0 19 19
Macao	Af.	China	South Ocean	22 12 44 N	113 46 15 E	7 55 5
Madrid	Eur.	Spain	New Caſtile	40 25 0 N	3 44 30 W	0 14 58
Port Mahon, FortSt.Philip	Eur.	Ild. Minorca	Mediter. Sea	39 50 46 N	3 48 30 E	0 15 14
Malacca	Af.	India	Straits Malacca	2 12 6 N	102 5 0 E	6 48 20
Malines	Eur.	Netherlands		51 1 30 N	4 28 45 E	0 17 55
St. Malo	Eur.	France	Eng. Channel	48 38 59 N	2 2 15 W	0 8 9
Ild. Malta	Eur.	Ital	Mediter. Sea	35 54 0 N	14 28 30 E	0 57 54

Names of Places.	Continent.	Country.	Coaſt or Province.	Latitude.	Longitude.	
					In Degrees.	In Time.
				° ′ ″	° ′ ″	° ′ ″
Manila	Aſ.	Iſl. Manila	South Ocean	14 30 N	120 20 E	8 1 20
Marſeilles	Eur.	France	Mediter. Sea	43 17 45 N	5 22 15 E	0 21 29
St. Martha	Am.	Terra Firma	Caribean Sea	11 26 40 N	74 4 30 W	4 56 18
Martinico, St. Peter's Fort	Am.	Weſt Indies	Atl. Ocean	14 44 N	61 21 16 W	4 5 25
Iſl. Mauritius, Port Louis	Am.	Madagaſcar	Indian Ocean	20 9 45 S	57 28 0 E	3 49 52
Meaux	Eur.	France	Champaigne	48 57 37 N	2 52 30 E	0 11 30
Mergui	Aſ.	India	Kingdom Siam		98 8 45 E	6 32 35
Metz	Eur.	France	Lorrain	49 7 5 N	6 11 0 E	0 24 44
Mexico	Am.	Mexico	Inland	20 0 0 N	103 40 0 W	6 54 40
Modena	Eur.	Italy	Modena	44 34 0 N	11 12 30 E	0 44 50
Mons	Eur.	Netherlands		50 27 10 N	3 57 15 E	0 15 49
Montpellier	Eur.	France	Languedoc	43 36 33 N	3 52 45 E	0 15 31
Moſcow	Eur.	Ruſſia	Moſcow	55 45 20 N	37 46 15 E	2 31 5
Moulins	Eur.	France	Lionois	46 34 4 N	3 20 0 E	0 13 20
Nancy	Eur.	France	Lorrain	48 41 28 N	6 11 30 E	0 24 46
Nangaſachi	Aſ.	Capital Japan	South Sea	32 32 N	128 46 15 E	8 35 5
Nants	Eur.	France	River Loire	47 13 17 N	1 33 45 W	0 6 15
Naples, Royal College	Eur.	Italy	Mediter. Sea	40 50 45 N	14 13 45 E	0 56 55
Narbonne	Eur.	France	Mediter. Sea	43 11 13 N	3 0 15 E	0 12 1
Nice	Eur.	France	Medit. Sea	43 41 54 N	7 17 15 E	0 29 9
Nieuport	Eur.	Flanders	German Ocean	51 7 41 N	2 45 0 E	0 11 0
Ningpo	Aſ.	China	South Sea	29 57 45 N	120 18 0 E	8 1 12
Niſmes	Eur.	France	Languedoc	43 50 35 N	4 21 15 E	0 17 25
Noyon	Eur.	France	Iſ. of France	49 34 37 N	3 0 45 E	0 12 3
Nuremberg	Eur.	Germany	Franconia	49 26 55 N	11 4 0 E	0 44 16
Olinde	Am.	Braſil	S. Atl. Ocean	8 13 0 N	35 1 0 W	2 20 4
St. Omer's	Eur.	Netherlands	Flanders	50 44 46 N	2 15 0 E	0 9 0
Orleans	Eur.	France	Orleanois	47 54 4 N	1 54 15 W	0 7 37
New Orleans	Am.	Louiſiana	Riv. Miſſiſippi	29 57 45 N	89 58 45 W	5 59 55
Oſtend	Eur.	Flanders	German Ocean	51 13 55 N	2 55 0 E	0 11 40
Oxford	Eur.	England	Oxfordſhire	51 45 0 N	1 16 0 W	0 5 4
Padua	Eur.	Italy	Venice	45 22 26 N	11 55 30 E	0 47 42
Panama	Am.	Mexico	South Ocean	8 57 48 N	80 21 W	5 21 24
Paris, Obſerva.	Eur.	France	Iſ. of France	48 50 14 N	2 20 0 E	0 9 20
Pau	Eur.	Switzerland	Bearn	43 15 0 N	0 9 0 W	0 0 36
St. Paul de Leon	Eur.	France	Eng. Channel	48 40 55 N	4 0 15 W	0 16 1
Pekin	Aſ.	China	Inland	39 54 0 N	116 22 30 E	7 45 30
Perinaldi	Eur.	Italy	Medit. Sea	43 53 20 N	7 40 0 E	0 30 40
Perpignan	Eur.	France	Rouſſillon	42 41 55 N	2 54 0 E	0 11 36
St. Peterſbourg	Eur.	Ruſſia	Baltic Sea	59 56 0 N	30 20 0 E	2 1 20

Names of Places.	Continent.	Country.	Coaſt or Province.	Latitude.	Longitude.	
					In Degrees.	In Time.
				° ′ ″	° ′ ″	H. M. S.
Petit-Goave	Am.	If. Hiſpaniola	Atl. Ocean	18 27 N	72 33 45 W	4 50 15
Plimouth Town	Eur.	England	Devonſhire	50 26 N	4 18 51 W	0 17 15
Do. Ram-Head				50 23 N	4 22 25 W	0 17 30
Do. Edyſtone				50 12 N	4 25 58 W	0 17 44
Pondicherry	Aſ.	India	Bay Bengal	11 56 30 N	75 7 30 E	5 0 30
Porto-Bello	Am.	New Spain	Carib. Sea	9 33 5 N	79 50 0 W	5 19 20
Portſmouth	Eur.	England	Eng. Channel	50 49 N	1 5 W	0 4 20
Prague	Eur.	Bohemia		50 4 30 N	14 45 0 E	0 59 0
If. of Pulicondor	Aſ.	Gulf of Siam	Ind. Ocean	8 40 N	107 20 E	7 9 20
Quebec	Am.	Canada	Riv. S. Laurence	46 55 0 N	69 53 0 W	4 39 32
Quito	Am.	Peru	Inland	0 13 17 S	77 55 0 W	5 11 40
Antient Rakah	Aſ.	Meſopotamia	Riv. Euphrates	36 1 N	38 50 0 E	2 35 20
Reims	Eur.	France	Champaigne	49 14 36 N	4 3 0 E	0 16 12
Rennes	Eur.	France	Britany	48 6 45 N	1 42 0 W	0 6 48
Rimini	Eur.	Italy	Adr. Sea	44 3 43 N	12 34 15 E	0 50 17
Rhodes	Eur.	France	Guienne	44 21 0 N	2 34 15 E	0 10 17
Rochelle	Eur.	France	Bay Biſcay	46 9 43 N	1 15 45 W	0 5 3
Rodrigues	Aſ.	Madagaſcar	Indian Ocean	19 40 40 S	63 10 0 E	4 12 40
Rome, S Peter's	Eur.	Italy	River Tiber	41 53 54 N	12 29 15 E	0 49 57
Rotterdam	Eur.	Holland	German Ocean	51 56 0 N	4 28 15 E	0 17 53
Rouen	Eur.	France	River Seyne	49 26 43 N	1 5 15 E	0 4 21
Cape Sable	Am.	New Scotland	Atl. Ocean	43 24 0 N	65 30 W	4 22 0
Salonique	Eur.	Turkey	Archipelago	40 41 10 N	23 8 0 E	1 32 33
Scilly Iſles, St. Agnes Light-houſe	Eur.	England	Eng. Channel	49 56 N	7 14 W	0 28 57
Seez	Eur.	France	Normandy	48 36 21 N	0 9 45 E	0 0 38
Sens	Eur.	France	Champaigne	48 11 56 N	3 17 0 E	0 13 9
Sherburne Catl.	Eur.	England	Oxfordſhire	51 39 25 N	1 0 0 W	0 4 0
Si-nghan-fu	Aſ.	China		34 16 30 N	108 43 45 E	7 14 55
Smyrna	Aſ.	Natolia	Archipelago	38 28 7 N	27 19 45 E	1 49 1
Soiſſons	Eur.	France	Iſl. of France	49 22 32 N	3 19 30 E	0 13 18
Stalbridge	Eur.	England	Devonſhire	50 57 N	2 23 30 W	0 9 34
Start Point	Eur.	England	Eng. Channel	50 9 N	3 51 15 W	0 15 25
Stockholm	Eur.	Sweden	Baltic Sea	59 20 31 N	18 2 45 E	1 12 11
Strafburg	Eur.	Germany	Alſace	48 34 35 N	7 46 15 E	0 31
Tarbes	Eur.	France	Gaſcony	43 14 2 N	0 3 30 E	0 0 [illegible]
Pic of Teneriff	Aſ.	Canaries	Atl. Ocean	28 12 54 N	16 32 0 W	1 6
If. of St. Thomas	Am.	Virgin Iſles	Atl. Ocean	18 21 55 N	64 33 0 W	4 18
If. Pulo Timon	Aſ.	Gulf Siam	Ind. Ocean	3 0 N	104 25 E	6 57
Tobolſki	Aſ.	Ruſſia	Siberia	58 12 18 N	68 12 45 E	4 32
Tornea	Eur.	Sweden	Gulf Bothnia	65 50 50 N	24 12 0 E	1 36

Names of Places.	Continent.	Country.	Coast or Province.	Latitude.	Longitude. In Degrees.	Longitude. In Time.
				° ′ ″	° ′ ″	H. M. S.
Toulon	Eur.	France	Mediter. Sea	43 7 24 N	5 56 30 E	0 23 46
Toulouse	Eur.	France	Languedoc	43 35 54 N	1 26 15 E	0 5 45
Tours	Eur.	France	Orleanois	47 23 44 N	0 41 15 E	0 2 45
Tripoli	Af.	Barbary	Mediter. Sea	32 53 40 N	13 5 15 E	0 52 21
Turin	Eur.	Italy	River Po	45 5 20 N	7 40 0 E	0 30 40
Upfal	Eur.	Sweden	River Sala	59 51 50 N	17 42 15 E	1 10 49
Uraniberg	Eur.	Denmark	Baltic Sea	55 54 15 N	12 52 30 E	0 51 30
Valparais	Am.	Chili	South Sea	33 2 36 S	72 19 15 W	4 49 17
Venice	Eur.	Italy	Adriat. Sea	45 25 0 N	12 4 30 E	0 48 18
Vera Cruz	Am.	New Spain	Gulf Mexico	19 12 N	97 30 E	6 30 0
Verdun	Eur.	France	Lorrain	49 9 18 N	5 22 45 E	0 21 31
Verona	Eur.	Italy	Venice	45 26 26 N	11 18 30 E	0 45 14
Verfailles	Eur.	France	Il. of France	48 48 18 N	2 7 15 E	0 8 29
Cape Verd	Af.	Negroland	Atl. Ocean	14 43 0 N	17 10 0 W	1 8 40
Vienna, Imperial Obferva.	Eur.	Germany	River Danube	48 12 48 N	16 22 30 E	1 5 30
Vintimiglia	Eur.	Italy	Mediter. Sea	43 53 20 N	7 37 30 E	0 30 30
Virgin Gorda Fort	Am.	Weft Indies	Atl. Ocean	18 18 N	64 0 W	4 16 0
Cape Virgin's	Am.	Patagonia	Atl. Ocean	52 26 N	71 5 W	4 44 20
Wakefield	Eur.	England	Yorkfhire	53 41 N	1 33 30 W	0 6 14
Wanftead	Eur.	England	Eflex	51 34 0 N	0 2 30 E	0 0 10
Wittenberg	Eur.	Germany	Saxony	51 43 10 N	12 33 30 E	0 50 14
Ylo	Am.	Peru	South Sea	17 36 15 S	71 13 0 W	4 44 52
York	Eur.	England	River Ouſe	53 59 N	1 6 40 W	0 4 27
New York	Am.	New England	Atl. Ocean	40 43 N	74 9 W	4 56 36