

X. *A Letter from Mr. Peter Wargentin, F. R. S. Secretary to the Royal Academy of Sciences at Stockholm, to the Rev. Nevil Maskelyne, B. D. F. R. S. and Astronomer Royal; concerning the Difference of Longitude of the Royal Observatories at Paris and Greenwich, resulting from the Eclipses of Jupiter's first Satellites, observed during the last Ten Years: to which is added, a Comparative Table of the corresponding Observations of the First Satellite, made in the principal Observatories.*

Vir plurimum reverende atque celeberrime,

Read Feb. 6, 1777. **P**ETIISTI in utrifque litteris tuis, “ve-
 “ lim observationes fatellitum Jovis,
 “ præcipuè primi, a te GRENOVICI, et a Cl. D. MESSIER
 “ PARISIIS, ab anno 1765 habitas, inter fe conferre, ut
 “ inde eliciatur vera differentia utriufque meridiani:”
 huic defiderio tuo lubens fatisfacio.

Tuis observationibus primi fatellitit non nifi 17 cor-
 respondentes MESSIERII obtigerunt; quarum 8 fuerunt
 immerfiones

immerfiones, et g emerfiones. Ipfas obfervationes, inter fe et cum multis aliis, atque cum poftremâ editione mearum tabularum (eâ fcilicet, quam alteri editioni aftronomiæ fuæ inferuit Cl. DELALANDIUS) comparatas, videas in fubjunctâ appendice, in quâ Paris Cl. indicat obfervationes MESSIERII, in palatio Clugny; Paris O. autem, in ipfo obfervatorio regio habitas. Hîc fufficiat attuliffe refultantes a quovis immerfionum et emerfionum correfpondentium pari, meridianorum differentias.

Ex immerfionibus correfp.	' "	Ex emerfionibus.	' "
1765, Dec. 24. prodit diff. merid.	8 35	1767, Apr. 9. differ. merid.	9 49
1769, Apr. 12.	9 31	1768, Mai. 11.	9 29
Apr. 28.	9 58	Jun. 3.	9 33
1772, Jun. 9.	9 59	Jun. 19.	10 16
Jûl. 11.	9 23	1769, Mai. 16.	9 26
1774, Sept. 26.	9 49	Jun. 8.	9 45
Oft. 3.	9 26	1770, Aug. 5.	9 11
Oft. 21.	9 47	1773, Oft. 25.	9 23
	9 39	Nov. 1.	9 39
Media ex imm. merid. differ.	9 39	Media ex emerfionibus,	9 37
Med. exclufa prima,	9 42	Med. exclufa quarta,	9 32

Tu, vir celeberrime, fere femper ufus es telescopio NEWTONIANO 6 pedum: CL. MESSIER plerumque GREGORIANO $2\frac{1}{2}$ pedum, vel acromatico $3\frac{1}{2}$ pedum, vel aliis æquales

æqualis fere potentiaë, quorum neutrum non plusquam centies objectorum diametros amplificat. Æquales ferè inventæ per immerfiones et emerfiones correspondentes meridianorum differentiaë, fatis indicare videntur, ferme æqualis quoque præstantiaë fuiſſe utriuſque obſervatoris instrumenta. Alium et certioſorem modum ea comparandi neſcio, præcipuè cum tu ^(a) nullibi indicaveris potentiam tui NEWTONIANI: nam longitudo ſola ambiguum eſt argumentum.

Per medium itaque deductum ex 7 paribus immerſionum et 8 emerſionum, invenitur differentia inter meridianum GRENOVICENSEM et obſervatorium CL. MESSIER, 9' 38"; vel ſecluſis uno immerſionum uno emerſionum pari, utpote quæ nimium a reliquis recedentem, indicant meridianorum differentiam, 9' 37"; adeoque foret inter obſervatorium GRENOVICENSE et regium Pariſinum 9' 35", hoc eſt 19 ſecundis major quam hucusque putavimus. Obſtupui videns tantam incertitudinem circa veram meridianorum differentiam inter duo præcipua orbis obſervatoria, eaque vicina, in quibus ingens obſervationum numerus, annis

(a) The diameter of the aperture of this telescope is 9,4 inches, as is mentioned in the preface to my Greenwich Observations, from 1765 to 1774, published this year. N. M.

plusquam

plufquam 100, habitus eft. Quid tum de aliis fentien-
 dum? Ab unâ parte vix perfuadere mihi poffum, tantum
 errorem tamdiu potuiffè latere; vel comparatas observa-
 tiones eclipfium Solis, Lunæ, occultationum fixarum, &c.
 tam multum potuiffè fallere: ab alterâ, egregius 15 bo-
 narum observationum confenfus, haud facile fortuitus,
 fidem quandam mereri videbatur; nifi observationes fa-
 tellitum, ad determinandas accuratè longitudinum dif-
 ferentias, prorfus inepats judicaveris.

Ad tollendum hoc dubium, confului observationes
 primi fatellitit, eodem tempore, in ipfis obfervatoriis re-
 giis, quarum non nifi duæ funt immerfiones, fed novem
 emerfiones.

Immerf.	' "	Emerf.	' "
1767, Jan. 12. diff. merid.	9 16	1766, Apr. 11.	9 55
1772, Jul. 11.	9 4	1767, Mart. 22.	9 36
	<hr style="width: 50px; margin: 0 auto;"/>	Apr. 16.	9 32
Medium ex hifce duabus,	9 10	Apr. 30.	9 5
		Mai. 9.	9 47
		Jun. 1.	10 28
		Jun. 3.	9 4
		1769, Jun. 8.	10 13
		1773, Oct. 5.	9 37
		Medium ex omnibus,	9 42
		exclufis 6â et 8â,	9 32

Harum

Harum longe minor est consensus: si tamen sumatur medium, erit id $9' 26''$ vel $9' 21''$.

Uterius comparavi septem paria immerfionum et 4 emerfionum, annis 1761—1764, in utroque obfervatorio captarum: medium ex prioribus reperi $9' 26''$, ex posterioribus $9' 30''$. Et ne quid deeffet, excuffi quoque obfervationes ante annum 1700 factas; inter quas 12 immerfiones correspondentes indicant, per medium, differentiam meridianorum $9' 57''$; fed 7 emerfiones tantummodo $8' 45''$: ex hoc utroque medio refultat novum $9' 21''$.

Porro tentavi, mediantibus meis obfervationibus, quorum multæ tuis funt correspondentes, multæ Parifiensibus, quæfitam ftabilire meridianorum differentiam. Ego femper ufus fum tubo achromatico DOLLONDIANO 10 pedum, cum oculari, quod objecta 90 amplificat, et valde diftinéta reddit.

Immerf.

Immerf. correfp.		Emerf.	
	h ' "		h ' "
1765, Dec. 1.	I 12 34	1766, Mart. 5.	I 12 11
(b) 1766, Oét. 10.	I 12 14	1767, Jun. 1.	I 12 7
1768, Apr. 2.	I 13 10	1768, Jun. 12.	I 12 16
1769, Mart. 29.	I 11 47	1769, Mai. 16.	I 11 32
1774, Sept. 12.	I 12 32	Jun. 8.	I 12 19
Oét. 3.	I 12 12	1771, Aug. 17.	I 12 0
1775, Oét. 1.	I 12 59	Sept. 25.	I 12 8
Medium,	I 12 14	1772, Sept. 27.	I 12 14
Sed tua obfervatio, die 10 Oét. 1766,		1773, Oét. 25.	I 12 31
vix recte fe habere potest. Illá		1774, Dec. 29.	I 12 23
neglectá, manet ex reliquis me-		1775, Feb. 22.	I 12 16
dium,	I 12 32.	Dec. 27.	I 12 11
		Medium ex his,	I 12 11

Obfervationes emerfionum fatis pulchrè confpirant: medium ex immerfionibus et emerfionibus innuit differentiam meridianorum Grenovicenfis et Stockholmenfis $1^h 12' 21''$. Perfuaſus ſum eam $1^h 12' 20''$ vix eſſe minorem. Per medium ex 8 obfervationibus correfponden-

(b) There was a miſtake of twelve hours in ſetting down this obſervation at Greenwich, by the clock keeping fidereal time, which made an error of $1' 49''$ in the reduction to apparent time. The correſt time of immerſion is $16^h 59' 31''$, which happens to agree exactly with Mr. WARGENTIN'S calculation, and the difference of longitude of Stockholm and Greenwich by this obſervation is $1^h 12' 14''$ inſtead of $1^h 10' 25$ ſet down above; and the mean difference from all the ſeven correfponding immerſions is $1^h 12' 30''$. See the errata printed with my Obſervations. N. M.

tibus,

tibus, quæ habitæ sunt annis 1761—1764, emergit $1^h 12' 25''$.

Quod attinet differentiam meridianorum observatorii Parisiensis et Stockholmenfis, ex 8 immerfionibus et 13 emerfionibus primi fatellitis fimul in utroque notatis ante annum 1760, conclufi eam, per medium, effe $1^h 2' 51''$. Sed 7 immerfiones et 12 emerfiones correspondentes, factæ post annum 1760, eam paulo minorem, fcilicet $2' 47''$, reddunt. Nihilominus, cum per observationes quarundam eclipsium solarium evincere conati funt celeberrimi viri, PINGRÉ, DU SEJOURS, et LEXELL, eam paucis fecundis effe majorem, non refragabor affumere eam $1^h 2' 55''$, quâ subtractâ ab inventâ differentiâ observatorum Grenovicenfis et Stockholmenfis $1^h 12' 21''$, reftat differentia Grenovicenfis et Parisiensis $9' 26''$.

Omnes itaque hæ difquisitiones testantur, differentiam quæfitam majorem effe $9' 16''$ quantam hucusque existimavimus; et ni fallor ad $9' 25''$ proximè accedere; de quâ re tamen totum ad te, vir celeberrime, defero iudicium.

Interim hinc apparet, arduum fane effe, præcifas meridianorum differentias, ope observationum fatellitum Jovis, determinare. Fixarum occultationes a Lunâ, probè observatæ et excuffæ, certiolem fine dubio fuppeditant methodum.

Valde

Valde miror, quare illi, qui bonum telefcopium vel tubum habent, eo non femper in obfervandis fatellitibus utantur, fed jam hoc, jam alio, forte minus præfanti. Obfervationes multum dubias, vel aëris vitio vel aliam obcauffam, ne quidem in diarium refero, nam nulla obfervatio præftat malæ. Quantum malæ obfervationes, pro bonis venditatae, me confuderint et torferint, dicere non poffum.

Quartus, die 8 Februarii hujus anni, eclipfin tantum partialem paffus eft. Magnum tuæ in me amicitiaë fignum id interpretabor, fi, quovis anno finito, tuas mecum communicare velis obfervationes fatellitum; nam his, etiam fenex, delector. Hanc quoque provinciam, examinandi motus fatellitum, mihi, quafi tacito confenfu, detuliffe videntur collegæ aftronomi. Ceterum ingruens ætas, nimiaë occupationes quas fecretarii munus injungit, defectus instrumentorum (nam murali nondum inftitutus fum, quidquid dicat Celeb. LALANDIUS) ut taceam modicas ingenii vires, vetant quo minus aliquid tuâ vel aliorum exfpectatione dignum præftare poffim ^(c). Frigus hâc hieme in Sueciâ continuum fuit, a 28 Dec. ad 5 Februarii; fed neutquam, pro ratione climatis, præter

(c) Notwithstanding the author's modefty, the aftronomers of Europe know him better, and lament with him that he is not fo well provided with capital inftruments as he wifhes and deferves to be. N. M.

modum, rigidum: plerumque 5 vel 10 gradum thermometri REAUMURIANI. Diebus tantum 26 et 27 Januarii, ad 17 et 18 gradus exasperatum fuit. Minor quoque nivis copia apud nos fuit, quam pro solito. Miror itaque intensitatem frigoris, eodem tempore, apud externos.

Dab. Stockholmæ, die 19 Mart. 1776.

Observationes primi satellitis Jovis in præcipuis observatoriis habitæ, inter se et cum tabulis comparatæ.

Ann.	Temp. Observationis. M. D.	Observationis.			Im.	Calculus.			Diff. Calc.	Observatorium.
		h	'	"		h	'	"		
1765. Sept.	21.	16	53	22	Im.	16	53	15	0 7 —	Stockholm.
	Oct. 23.	13	31	6	—	13	31	30	0 24 +	Tyrnav.
	Dec. 1.	10	40	11	—	10	40	48	0 37 +	Greenwich.
		11	33	25	—	11	33	33	0 8 +	Lund.
		11	50	56	—	11	51	0	0 4 +	Tyrnav.
		11	52	45	—	11	52	59	0 14 +	Stockholm.
	8.	12	31	34	—	12	31	25	0 9 —	Greenw.
	15.	14	22	3	—	14	21	40	0 23 —	Greenw.
		15	31	40	—	15	31	52	0 12 +	Tyrnav.
	17.	10	1	15	—	10	1	26	0 11 +	Stockh.
	22.	16	12	19	—	16	11	47	0 32 —	Greenw.
	24.	10	39	27	—	10	39	19	0 8 —	Greenw.
		10	48	2	—	10	48	37	0 35 +	Paris Cl. d.
		11	49	6	—	11	49	31	0 25 +	Tyrnav.
1766. Jan.	2.	8	8	44	—	8	9	24	0 40 +	Stockh. d.
	9.	9	40	16	—	9	40	37	0 21 +	Lund.
	16.	11	50	51	—	11	51	17	0 26 +	Stockh.
	23.	13	40	32	—	13	41	28	0 56 +	Upsala d.
	25.	8	8	30	—	8	9	30	1 0 +	Upsala d.

Observationes

Observationes comparatæ primi satellitis Jovis.

Ann.	Temp.	Observationis.		Calculus.	Diff. Calc.	Observatorium.				
M. D.	h	'	"	h	'	"				
1766. Jan.	25.	8	10	39	Im.	8	11	10	σ 31 +	Stockholm.
Febr.	15.	16	6	31	Em.	16	6	14	o 17 —	Upsala.
	24.	12	31	20	—	12	31	48	o 28 +	Stockholm.
Mart.	5.	7	43	55	—	7	44	25	o 30 +	Greenw.
		8	55	4	—	8	54	56	o 8 —	Upsala.
		8	56	6	—	8	56	36	o 30 +	Stockh.
		9	45	36	—	9	45	39	o 3 +	Peterfb.
	10.	15	20	27	—	15	20	58	o 31 +	Paris. Cl.
		15	20	35	—	15	20	56	o 21 +	Paris. O.
	12.	9	49	54	—	9	50	3	o 9 +	Paris. O.
		9	49	56	—	9	50	5	o 9 +	Paris. Cl.
		10	33	12	—	10	33	32	o 20 +	Lund.
		10	50	41	—	10	50	59	o 18 +	Tyrnav.
		10	50	53	—	10	51	18	o 25 +	Upsala.
		10	52	13	—	10	52	58	o 45 +	Stockh.
		11	41	56	—	11	42	1	o 5 +	Peterfb.
	19.	12	30	15	—	12	30	8	o 7 —	Lund.
		12	47	52	—	12	47	54	o 2 +	Upsal. d.
	21.	7	16	36	—	7	16	48	o 12 +	Tyrnav.
	26.	13	33	36	—	13	34	13	o 37 +	Greenw.
	28.	8	12	33	—	8	12	44	o 11 +	Paris. Cl.
		9	8	56	—	9	8	53	o 3 —	Wien.
Apr.	4.	11	10	7	—	11	10	48	o 41 +	Upsala.
		11	10	21	—	11	10	29	o 8 +	Tyrnav.
		11	12	4	—	11	12	28	o 24 +	Stockh.
	11.	11	56	30	—	11	56	59	o 29 +	Greenw.
		12	6	25	—	12	6	15	o 10 —	Paris. O.
		13	2	32	—	13	2	26	o 6 —	Wien.
	20.	8	31	18	—	8	31	49	o 31 +	Paris. Cl.
		8	31	37	—	8	31	47	o 10 +	Paris. O.
		9	27	56	—	9	27	58	o 2 +	Wien.
		9	32	30	—	9	32	43	o 13 +	Tyrnav.

Z 2

Observationes

Observationes comparatæ primi satellitis Jovis.

Anni.	Temp. Observationis.	Calculus.			Diff. Calc.	Observatorium.							
		M. D.	h	'			"	h	'	"			
1766.	Apr. 20.		9	34	24	Em.	9	34	42	o	18	+	Stockholm.
			10	23	9	-	10	23	45	o	36	+	Peterfb.
	27.		11	30	20	-	11	30	42	o	22	+	Stockh.
May	13.		9	47	45	-	9	48	2	o	17	+	Tyrnav.
			9	49	24	-	9	50	1	o	37	+	Stockholm.
	20.		11	25	12	-	11	25	4	o	8	-	Lund.
Jun.	5.		9	54	1	-	9	53	44	o	17	-	Wien.
			9	58	39	-	9	58	29	o	10	-	Tyrnav.
O&t.	10. (d)		17	1	20	Im.	16	59	31	i	49	-	Greenw.
			18	11	45	-	18	11	42	o	3	-	Stockh.
	26.		16	27	59	-	16	28	13	o	14	+	Tyrnav.
Nov.	2.		17	21	9	-	17	21	18	o	9	+	Paris. Cl.
			18	22	20	-	18	22	12	o	8	-	Tyrnav.
			18	24	19	-	18	24	11	o	8	-	Stockholm.
	18.		16	36	1	-	16	35	51	o	10	-	Tyrnav.
25.		18	9	27	-	18	10	1	o	34	+	Lund. d.	
		18	29	37	-	18	29	27	o	10	-	Stockh.	
		13	44	46	-	13	45	9	o	23	+	Paris. O.	
Dec.	4.		13	44	53	-	13	45	11	o	18	+	Paris. Cl.
			17	25	29	-	17	25	29	o	0		Paris. O.
1767.	Jan. 3.		15	24	1	-	15	23	57	o	4	-	Greenw.
			11	41	41	-	11	42	15	o	34	+	Greenw.
			11	50	57	-	11	51	31	o	34	+	Paris. O.
	26.		15	34	34	-	15	34	40	o	6	+	Paris. Cl.
Feb.	2.		17	26	54	-	17	27	20	o	26	+	Paris. Obf.
			17	27	13	-	17	27	22	o	9	+	Paris. Cl.
			9	18	13	-	9	18	44	o	31	+	Tyrnav.
	20.		11	14	44	-	11	15	14	o	30	+	Stockholm.
	27.		11	57	7	-	11	58	6	o	59	+	Greenw. d.
Mart.	17.		8	12	16	Em.	8	11	32	o	44	-	Tyrnav.
			14	28	48	-	14	28	40	o	8	-	Greenw.

(d) This observation rightly reduced to apparent time is 16^h 59' 31'', which happens to agree exactly with Mr. WARGENTIN's calculation. N. M.

Observationes

Observationes comparatæ primi satellitis Jovis.

Ann.	Temp. Observationis.	Calculus.	Diff. Calc. Observatorium.
M. D.	h ' "	h ' "	' "
1767, Mar. 22.	14 38 24	Em. 14 37 56	o 28 — Paris. O.
31.	12 4 36	- 12 5 0	o 24 + Upfala.
	12 4 54	- 12 4 41	o 13 — Tyrnav.
	12 6 28	- 12 6 40	o 12 + Stockh.
Apr. 7.	14 1 46	- 14 1 35	o 11 — Upfala.
	14 2 59	- 14 3 15	o 16 + Stockh.
9.	7 20 1	- 7 20 13	o 12 + Greenw.
	7 29 50	- 7 29 31	o 19 — Paris. Cl.
14.	14 47 52	- 14 47 36	o 16 — Greenw.
16.	9 16 13	- 9 16 43	o 30 + Greenw.
	9 25 45	- 9 25 59	o 14 + Paris. O.
23.	12 23 22	- 12 23 10	o 12 — Tyrnav.
	12 23 42	- 12 23 29	o 13 — Upfala.
	12 24 30	- 12 25 9	o 39 + Stockh.
30.	13 9 10	- 13 8 47	o 23 — Greenw.
	13 18 15	- 13 18 3	o 12 — Paris. O.
Mai. 9.	9 32 26	- 9 32 58	o 32 + Greenw.
	9 42 13	- 9 42 14	o 1 + Paris. O.
	10 43 7	- 10 43 10	o 3 + Tyrnav.
16.	12 38 6	- 12 37 54	o 12 — Tyrnav.
30.	10 15 32	- 10 15 17	o 15 — Philadelphia.
Jun. 1.	9 44 1	- 9 44 20	o 19 + Greenw.
	9 54 29	- 9 53 36	o 53 — Paris. O. d.
	10 56 8	- 10 56 31	o 23 + Stockh.
8.	11 37 42	- 11 37 49	o 7 + Greenw.
	11 46 46	- 11 47 5	o 19 + Paris. O.
Nov. 21.	19 10 24	Im. 19 10 35	o 11 + Lund.
Dec. 23.	14 43 47	- 14 43 45	o 2 — Paris. Cl.
30.	16 24 27	- 16 24 16	o 11 — Greenw.
1768. Jan. 22.	16 24 13	- 16 23 37	o 36 — Greenw.
31.	12 53 11	- 12 52 56	o 15 — Paris. O.
	12 53 22	- 12 52 58	o 24 — Paris. Cl.

Observationes:

Observationes comparatæ primi fatellitis Jovis.

Ann.	Temp.	Observationis.		Calculus.		Diff. Calc.	Observatorium.
M. D.		h' "		h' "		' "	
1768.	Feb.	14.	16 39 50	Im.	16 39 28	o 22 —	Paris. Cl.
			17 42 37	-	17 42 21	o 16 —	Stockh.
		16.	12 8 37	-	12 9 14	o 37 +	Upfala.
			12 8 54	-	12 8 55	o 1 +	Tyrnav.
			12 11 9	-	12 10 54	o 15 —	Stockh.
			12 59 24	-	12 59 57	o 33 +	Petersburg.
	Mart.	1.	9 46 49	-	9 47 26	o 37 +	Philadelphia.
			14 57 57	-	14 57 21	o 36 —	Paris. Cl.
			15 58 20	-	15 58 15	o 5 —	Tyrnav.
		3.	10 26 59	-	10 27 4	o 5 +	Tyrnav.
		8.	17 54 32	-	17 54 10	o 22 —	Upfala.
		10.	11 22 15	-	11 21 56	o 19 —	Paris. Cl.
			12 22 40	-	12 22 50	o 10 +	Tyrnav.
			13 13 25	-	13 13 52	o 27 +	Petersburg.
		17.	13 32 17	-	13 32 47	o 30 +	Geneve.
		19.	9 39 0	-	9 38 56	o 4 —	Petersburg.
		24.	15 29 3	-	15 29 3	o 0	Geneve.
		26.	9 43 3	-	9 43 16	o 13 +	Paris. O.
			9 58 1	-	9 58 6	o 5 +	Geneve.
			10 43 56	-	10 44 12	o 16 +	Tyrnav.
			11 34 52	-	11 35 14	o 22 +	Petersburg.
	Apr.	2.	11 29 33	-	11 30 25	o 52 +	Greenw. d.
			12 42 43	-	12 42 36	o 7 —	Stockh.
		18.	12 1 37	Em.	12 1 14	o 23 —	Greenw.
		25.	8 56 50	-	8 56 33	o 17 —	Philadelphia.
			13 57 19	-	13 57 10	o 9 —	Greenw.
		27.	8 35 11	-	8 35 26	o 15 +	Paris. Cl.
	Mai.	4.	10 31 0	-	10 30 56	o 4 —	Paris. Cl.
			11 32 18	-	11 31 50	o 28 —	Tyrnav.
			11 33 22	-	11 33 49	o 27 +	Stockh.
		11.	12 16 46	-	12 16 46	o 0	Greenw.
			12 26 15	-	12 26 4	o 11 —	Paris. Cl.

Observationes comparatæ primi satellitis Jovis.

Ann.	Temp. Observationis.	Calculus.	Diff. Calc.	Observatorium.
M. D.	h ' "	h ' "	' "	
1768.	Mai. 20.	8 49 54 -	8 49 29	o 25 — Paris. Cl.
		9 52 6 -	9 52 22	o 16 + Stockh.
	27.	10 43 14 -	10 43 44	o 30 + Paris. Cl.
Jun.	3.	12 28 6 -	12 28 19	o 13 + Greenw.
		12 37 39 -	12 37 37	o 2 — Paris. Cl.
	12.	8 50 16 -	8 50 18	o 2 + Greenw.
		10 0 23 -	10 0 49	o 26 + Upsala.
		10 2 32 -	10 2 29	o 3 — Stockh.
	19.	10 43 27 -	10 43 38	o 11 + Greenw.
		10 53 43 -	10 52 56	o 47 — Paris. Cl. d.
Jul.	5.	9 8 5 -	9 8 13	o 8 + Paris. Cl.
1769.	Jan. 17.	18 37 12 Im.	18 37 6	o 6 — Stockh.
	Feb. 2.	16 46 30 -	16 46 19	o 11 — Tyrnav.
	16.	14 21 10 -	14 20 57	o 13 — Norriton.
		14 21 51 -	14 21 49	o 2 — Philadelphia.
	23.	16 15 1 -	16 14 59	o 2 — Norriton.
		16 16 21 -	16 15 51	o 30 — Philadelphia.
Mart.	20.	16 9 9 -	16 9 3	o 6 — Paris. Cl.
	29.	12 25 7 -	12 24 22	o 45 — Greenw.
		13 34 34 -	13 34 34	o 0 Tyrnav.
		13 36 54 -	13 36 33	o 21 — Stockh.
Apr.	3.	14 49 25 -	14 49 49	o 24 + Norriton.
		14 50 48 -	14 50 41	o 7 — Philadelphia.
	5.	15 13 35 -	15 13 1	o 34 — Lund.
		15 32 30 -	15 32 27	o 3 — Stockh.
	10.	16 46 0 -	16 45 41	o 19 — Norriton.
	12.	11 14 37 -	11 14 40	o 3 + Norriton.
		11 15 49 -	11 15 32	o 17 — Philadelphia.
		16 16 8 -	16 16 9	o 1 + Greenw.
		16 25 39 -	16 25 27	o 12 — Paris. Cl.
21.		12 50 14 -	12 50 1	o 13 — Paris. Cl.
		13 52 41 -	13 52 54	o 13 + Stockh. d.

Observationes

Observationes comparatæ primi fatellitis Jovis.

Ann.	Temp. M. D.	Observationis			-	Calculus.			Diff. Calc.	Observatorium.
		h	'	"		h	'	"		
1769.	Apr. 28.	14	35	17	-	14	36	7	0	50 + Greenw.
		14	45	15	-	14	45	25	0	10 + Paris. Cl.
	30.	9	13	42	-	9	14	16	0	34 + Paris. O.
		10	16	38	-	10	17	9	0	31 + Stockh.
Mai.	5.	11	29	27	-	11	29	43	0	16 + Norriton.
		11	30	28	-	11	30	35	0	7 + Philadelphia.
	12.	10	37	6	Em.	10	35	37	1	29 — Otaheite. d.
	16.	9	31	35	-	9	30	54	0	41 — Greenw.
		9	41	1	-	9	40	12	0	49 — Paris. Cl. d.
		10	43	7	-	10	43	5	0	2 — Stockh.
	21.	11	55	13	-	11	55	5	0	8 — Norriton.
	23.	11	34	52	-	11	34	28	0	24 — Paris. Cl.
		12	37	42	-	12	37	21	0	21 — Stockh.
	28.	11	31	59	-	11	31	53	0	6 — S. Joseph.
Jun.	4.	10	45	31	-	10	46	31	1	0 + Otaheite.
		7	53	58	-	7	54	8	0	10 + S. Joseph.
	6.	10	11	32	-	10	11	27	0	5 — Norriton.
		9	40	56	-	9	41	20	0	24 + Greenw.
	8.	9	50	41	-	9	50	38	0	3 — Paris. Cl.
		9	51	9	-	9	50	36	0	33 — Paris. O.
		10	51	45	-	10	51	51	0	6 + Upfala.
		10	53	15	-	10	53	31	0	16 + Stockh.
	13.	7	8	16	-	7	8	28	0	12 + Otaheite.
		12	5	1	-	12	5	1	0	0 Norriton.
	15.	11	35	33	-	11	34	53	0	40 — Greenw.
	18.	14	33	36	-	14	33	37	0	1 + Otaheite.
	20.	9	1	43	-	9	1	57	0	14 + Otaheite.
		11	40	56	-	11	41	11	0	15 + Norriton.
	22.	8	27	35	-	8	27	51	0	16 + Philadelphia.
	24.	9	6	41	-	9	7	3	0	22 + Tyrnav.
	27.	10	56	15	-	10	55	39	0	36 — Otaheite.
	29.	8	2	52	-	8	3	14	0	22 + S. Joseph.

Observationes comparatæ primi satellitis Jovis.

Ann.	Temp. Observationis.	Calculus.	Diff. Calc. Observatorium.
M. D.	h ' "	h ' "	' "
1769. June 29.	10 21 55	Em. 10 21 25	o 30 — Philadelph.
Jul. 1.	9 50 24	- 9 50 31	o 7 + Greenwich.
6.	11 0 59	- 11 0 43	o 16 — Tyrnav.
13.	7 18 16	- 7 17 56	o 20 — Otaheite.
24.	11 51 49	- 11 51 24	o 25 — S. Joseph.
Aug. 23.	10 12 28	- 10 11 41	o 47 — Paris. Cl.
23.	7 15 48	- 7 15 14	o 34 — Philadelph.
1770. Jan. 29.	17 52 18	Im. 17 52 29	o 11 + Tyrnav.
Mart. 16.	17 2 47	- 17 2 16	o 31 — Greenwich.
25.	14 37 14	- 14 36 33	o 41 — Tyrnav.
Mai. 3.	13 9 36	- 13 9 33	o 3 — Tyrnav.
10.	14 45 45	- 14 46 20	o 35 + Lund.
26.	15 5 43	- 15 5 46	o 3 + Stockholm.
Jun. 4.	13 2 18	- 13 3 9	o 51 + Berlin.
11.	9 40 27	- 9 41 18	o 51 + Tyrnav.
20.	12 35 22	Em. 12 34 27	o 55 — Greenwich.
Jul. 13.	10 8 30	- 10 8 6	o 24 — Stockholm.
29.	9 5 7	- 9 5 19	o 12 + Greenwich.
Aug. 5.	9 6 24	- 9 5 33	o 46 — Chiffelhurst.
21.	9 59 15	- 9 59 1	o 14 — Berlin.
29.	8 34 19	- 8 34 13	o 6 — Tyrnav.
Aug. 5.	9 19 41	- 9 19 57	o 16 + Greenwich.
13.	9 20 42	- 9 20 16	o 26 — Chiffelhurst.
21.	9 28 52	- 9 29 12	o 20 + Paris. Cl.
28.	10 13 31	- 10 13 34	o 3 + Berlin.
29.	10 30 25	- 10 30 6	o 19 — Tyrnav.
30.	8 52 49	- 8 52 47	o 2 — Tyrnav.
Sept. 13.	8 15 14	- 8 14 46	o 28 — Paris. Cl.
1771. Mart. 28.	16 45 22	Im. 16 45 6	o 16 — Paris. Cl.
Apr. 13.	15 4 21	- 15 4 16	o 5 — Paris. Cl.
Mai. 22.	13 46 13	- 13 46 28	o 15 + Geneve.

Observationes comparatæ primi fatellitis Jovis.

Ann.	Temp. Observationis.	Calculus.	Diff. Calc.	Observatorium.
M. D.	h ' "	h ' "	' "	
1771. Mai. 22.	14 32 20	Im. 14 32 25	o 5 +	Tyrnav.
Jun. 7.	11 44 57	- 11 44 53	o 4 -	Paris. Cl.
	11 59 43	- 11 59 50	o 7 +	Geneve.
14.	13 52 20	- 13 52 14	o 6 -	Geneve.
	14 22 4	- 14 21 39	o 25 -	Berlin.
Jul. 23.	14 5 38	Em. 14 4 58	o 40 -	Greenwich.
25.	9 44 15	- 9 43 51	o 24 -	Tyrnav.
Aug. 1.	10 37 38	- 10 38 1	o 23 +	Paris. Cl.
10.	8 3 49	- 8 3 38	o 11 -	Tyrnav.
17.	8 49 47	- 8 49 53	o 6 +	Greenw.
	8 51 0	- 8 50 12	o 48 -	Chislehurst.
	9 14 12	- 9 14 8	o 4 -	Geneve.
	10 1 47	- 10 2 4	o 17 +	Stock.
Sept. 2.	8 23 55	- 8 24 2	o 7 +	Tyrnav.
	8 26 14	- 8 26 1	o 13 -	Stockholm.
9.	9 11 56	- 9 11 44	o 12 -	Greenw.
	9 12 18	- 9 12 3	o 15 -	Chislehurst.
25.	7 37 43	- 7 37 24	o 19 -	Greenw.
	8 49 51	- 8 49 35	o 16 -	Stockh.
Oct. 2.	9 35 40	- 9 35 26	o 14 -	Greenw.
	9 35 56	- 9 35 45	o 11 -	Chisleh.
11.	6 2 33	- 6 2 39	o 6 +	Greenw.
	6 3 16	- 6 2 58	o 18 -	Chisleh.
	7 13 21	- 7 12 47	o 34 -	Tyrnav.
Nov. 3.	7 32 32	- 7 32 12	o 20 -	Tyrnav.
19.	5 52 27	- 5 52 34	o 7 +	Stockh.
1772. Mai. 12.	15 11 30	Im. 15 12 1	o 31 +	Pekin.
Jun. 9.	14 57 33	- 14 57 14	o 19 -	Greenw.
	15 7 32	- 15 6 32	1 0 -	Paris. Cl.
	15 28 20	- 15 27 55	o 25 -	Perinaldo.
25.	13 9 17	- 13 18 43	o 34 -	Paris. O.

Observationes

Observationes comparatæ primi satellitis Jovis,

Ann.	Temp. Observationis.	Calculus.	Diff. Calc. Observatorium.
M. D.	h ' "	h ' "	' "
1772. Jun. 25.	13 40 9	Im. 13 40 8	o 1 — Perinaldo.
	14 20 1	— 14 19 39	o 22 — Tyrnav.
27.	15 22 54	— 15 23 10	o 16 + Pekin.
Jul. 2.	15 32 31	— 15 32 27	o 4 — Perinaldo.
11.	11 22 34	— 11 22 33	o 1 — Greenw.
	11 22 34	— 11 22 52	o 18 + Chiffelhurst.
	11 31 38	— 11 31 49	o 11 + Paris. O.
	11 31 57	— 11 31 51	o 6 — Paris. Cl.
	12 32 25	— 12 32 45	o 20 + Tyrnav.
18.	13 25 10	— 13 25 4	o 6 — Paris. O.
	14 25 41	— 14 25 59	o 18 + Tyrnav.
27.	9 38 2	— 9 38 25	o 23 + Chiffelhurst.
	9 47 28	— 9 47 24	o 4 — Paris. Cl.
	11 39 6	— 11 39 20	o 14 + Peterfb.
Aug. 3.	11 32 48	— 11 33 2	o 14 + Chiffelhurst.
	13 33 40	— 13 33 57	o 17 + Peterfb.
10.	13 36 46	— 13 37 10	o 24 + Paris. O.
	13 37 11	— 13 37 12	o 1 + Paris. Cl.
	15 28 26	— 15 29 8	o 42 + Peterfb.
21.	14 23 21	Em. 14 22 41	o 40 — Pekin.
26.	14 4 22	— 14 4 18	o 4 — Greenw.
28.	9 26 55	— 9 27 20	o 25 + Berlin.
	9 44 5	— 9 43 52	o 13 — Tyrnav.
30.	10 48 44	— 10 48 31	o 13 — Pekin.
Sept. 4.	11 23 38	— 11 23 26	o 12 — Lund.
	11 23 50	— 11 24 21	o 29 + Berlin.
	11 41 11	— 11 40 53	o 18 — Tyrnav.
8.	7 15 19	— 7 14 59	o 20 — Pekin.
13.	8 9 44	— 8 9 38	o 6 — Stockholm.
15.	9 12 7	— 9 12 29	o 22 + Pekin.
20.	9 47 54	— 9 47 49	o 5 — Lund.

Observationes comparatæ primi satellitis Jovis.

Anni.	Temp. Observationis.			Calculus.	Diff. Calc.	Observatorium.			
	M. D.	h	' "				h	' "	' "
1772. Sept.	20.	10	6	56	Em. 10	7	16	o 20 +	Stockh.
	22.	11	9	47	-	11	10	6	o 19 + Pekin.
	27.	10	52	31	-	10	52	47	o 16 + Greenw.
		12	2	52	-	12	3	18	o 26 + Upsala,
		12	4	45	-	12	4	58	o 13 + Stockh.
Oct.	4.	12	50	41	-	12	50	41	o 0 Chislehurff.
	6.	7	28	53	-	7	29	6	o 13 + Paris. O.
		8	13	17	-	8	13	30	o 13 + Berlin.
		8	30	12	-	8	30	2	o 10 — Tyrnav.
	13.	9	16	49	-	9	17	13	o 24 + Greenw.
		9	17	13	-	9	17	32	o 19 + Chislehurff.
		10	9	40	-	10	9	58	o 18 + Lund.
		10	10	13	-	10	10	53	o 40 + Berlin.
		10	27	31	-	10	27	25	o 6 — Tyrnav.
	17.	6	1	36	-	6	1	26	o 10 — Pekin.
	20.	11	13	59	-	11	14	11	o 12 + Greenw.
		11	14	32	-	11	14	30	o 2 — Chislehurff.
	22.	6	36	57	-	6	36	59	o 2 + Berlin.
		6	53	28	-	6	53	31	o 3 + Tyrnav.
	24.	7	58	20	-	7	58	10	o 10 — Pekin.
	29.	8	50	14	-	8	49	55	o 19 + Tyrnav.
	31.	9	54	21	-	9	54	25	o 4 + Pekin.
Nov.	9.	6	19	6	-	6	18	51	o 15 — Pekin.
	14.	5	59	28	-	5	59	23	o 5 — Greenw.
	16.	8	13	54	-	8	13	37	o 17 — Pekin.
Dec.	2.	6	29	46	-	6	29	41	o 5 — Pekin.
	9.	8	23	12	-	8	22	37	o 35 — Pekin.
	23.	5	15	3	-	5	14	39	o 24 — Lund.
		5	15	51	-	5	15	34	o 17 — Berlin.
	25.	6	36	12	-	6	35	36	o 36 — Pekin.
1773. Mai.	29.	15	18	46	Im. 15	18	4	o 42 —	Perinaldo. d.

Observationes

Observationes comparatæ primi satellitis Jovis.

Ann.	Temp. Observationis.	Calculus.	Diff. Calc. Observatorium.
M. D.	h ' "	h ' "	' "
1773. Jun. 14.	14 10 37	Im. 14 10 45	o 8 + Tyrnav.
16.	15 14 17	- 15 14 13	o 4 — Pekin.
21.	15 16 43	- 15 16 58	o 15 + Geneve.
Jul. 7.	13 35 59	- 13 36 23	o 24 + Perinaldo. <i>d.</i>
14.	15 28 55	- 15 28 45	o 10 — Perinaldo.
16.	11 27 8	- 11 27 40	o 32 + Petersburg.
23.	11 19 22	- 11 19 42	o 20 + Greenw.
	11 50 22	- 11 50 17	o 5 — Perinaldo.
30.	13 44 28	- 13 44 6	o 22 — Perinaldo.
	15 14 40	- 15 14 45	o 5 + Petersburg.
Aug. 6.	15 17 30	- 15 17 13	o 17 — Paris. Cl.
	15 17 36	- 15 17 11	o 25 — Paris. O.
	15 32 20	- 15 32 10	o 10 — Geneve.
8.	10 0 42	- 10 0 53	o 11 + Geneve.
	10 7 15	- 10 7 13	o 2 — Perinaldo.
	10 48 41	- 10 48 49	o 8 + Stockholm.
	11 37 37	- 11 37 52	o 15 + Petersb.
15.	11 41 5	- 11 40 47	o 18 — Paris. Cl.
	11 55 58	- 11 55 44	o 14 — Geneve.
	12 41 23	- 12 41 41	o 18 + Tyrnav.
	13 32 58	- 13 32 43	o 15 — Petersburg
22.	13 26 14	- 13 27 3	o 49 + Greenw. <i>d</i>
	15 28 20	- 15 28 17	o 3 — Petersb.
24.	9 8 24	- 9 8 18	o 6 — Stockholm
	15 41 22	- 15 41 46	o 24 + Pekin.
26.	10 10 31	- 10 10 40	o 9 + Pekin.
29.	15 32 41	- 15 32 25	o 16 — Paris. Cl.
	15 47 40	- 15 47 22	o 18 — Geneve.
	15 53 49	- 15 53 42	o 7 — Perinaldo.
31.	9 51 57	- 9 52 12	o 15 + Greenw.
	10 22 16	- 10 22 47	o 31 + Perinaldo.

Observationes

Observationes comparatæ primi fatellitis Jovis.

Ann.	Temp. Observationis. M. D.	Observationis.				Calculus.			Diff. Calc.	Observatorium.
		h	'	"		h	'	"		
1773.	Aug. 31.	11	2	7	Im.	11	2	24	o 17 +	Tyrnav.
	Sept. 7.	12	18	35	-	12	19	11	o 36 +	Perinaldo.
	9.	14	2	56	-	14	3	27	o 31 +	Pekin.
	14.	14	9	8	-	14	9	36	o 28 +	Geneve.
		15	46	14	-	15	46	35	o 21 +	Petersburg.
	16.	9	27	0	-	9	27	8	o 8 +	Stockholm.
	25.	12	26	7	-	12	26	27	o 20 +	Pekin.
	27.	9	6	28	Em.	9	6	30	o 2 +	Pekin.
	Oct. 2.	9	58	55	-	9	58	41	o 14 -	Tyrnav.
		10	49	49	-	10	49	43	o 6 -	Petersburg.
		16	33	55	-	16	34	8	o 13 +	Pekin.
	9.	10	44	40	-	10	45	13	o 33 +	Greenw.
		12	46	30	-	12	46	27	o 3 -	Petersburg.
	11.	7	15	30	-	7	15	36	o 6 +	Peterfb.
		12	59	19	-	13	0	1	o 42 +	Pekin.
	13.	7	28	57	-	7	29	12	o 15 +	Pekin.
	16.	12	50	34	-	12	51	2	o 28 +	Paris. Cl.
		13	12	37	-	13	12	19	o 18 -	Perinaldo.
	18.	7	19	48	-	7	20	5	o 17 +	Paris. Cl.
		7	41	33	-	7	41	22	o 11 -	Perinaldo.
		8	20	52	-	8	20	59	o 7 +	Tyrnav.
	20.	9	25	6	-	9	25	33	o 27 +	Pekin.
	25.	9	6	12	-	9	6	50	o 38 +	Greenw.
		9	15	35	-	9	16	8	o 33 +	Paris. Cl.
		9	15	49	-	9	16	6	o 17 +	Paris. O.
		9	37	1	-	9	37	31	o 30 +	Perinaldo.
		10	17	19	-	10	17	21	o 2 +	Upsala.
		10	18	43	-	10	19	1	o 18 +	Stockholm.
	27.	11	20	54	-	11	21	27	o 33 +	Pekin.
	29.	5	49	54	-	5	50	20	o 26 +	Pekin.
	Nov. 1.	11	2	10	-	11	2	25	o 15 +	Greenw.

Observationes

Observationes comparatæ primi satellitis Jovis.

Ann.	Temp.	Observationis.			Em.	Calculus.			Diff. Calc.	Observatorium.	
		M.	D.	h ' "		h ' "	' "				
1773.	Nov.	1.	11	11	49	Em.	11	11	43	o 6 — Paris. Cl.	
			11	33	24	—	11	33	o	o 24 — Perinaldo.	
	3.	26.	6	23	58	—	6	23	58	o o Lund.	
			6	12	30	—	6	13	3	o 33 + Perinaldo.	
	Dec.	3.	10.	6	35	2	—	6	35	13	o 11 + Lund.
				6	52	57	—	6	52	59	o 2 + Upfala.
				6	54	45	—	6	54	39	o 6 — Stockh.
				7	44	4	—	7	43	42	o 22 — Petersburg.
				8	46	25	—	8	46	5	o 20 — Upfala.
				8	47	58	—	8	47	45	o 13 — Stockh.
9				27	59	—	9	28	15	o 16 + Greenw.	
6				59	15	—	6	59	11	o 4 — Tyrnav.	
1774.	Jan.	2.	9	42	59	—	9	42	55	o 4 — Paris. Cl.	
			5	12	7	—	5	12	4	o 3 — Tyrnav.	
	11.	18.	6	4	24	—	6	4	10	o 14 — Paris. Cl.	
			7	7	2	—	7	7	3	o 1 + Stockh.	
	Feb.	3.	19.	7	48	22	—	7	48	20	o 2 — Greenw.
				6	15	33	—	6	15	8	o 25 — Paris. Cl.
				7	16	17	—	7	16	21	o 4 + Upfala.
				7	18	10	—	7	18	1	o 9 — Stockh.
	26.	Aug.	4.	5	38	58	—	5	38	41	o 17 — Stockh.
				6	23	29	—	6	23	14	o 15 — Greenw.
Sept.	3.	27.	12	32	38	Im.	12	32	16	o 22 — Tyrnav.	
			12	32	51	—	12	32	35	o 16 — Upfala.	
			12	34	42	—	12	34	15	o 27 — Stockh.	
			13	23	17	—	13	23	18	o 1 + Petersburg.	
			15	21	15	—	15	21	3	o 12 — Paris. Cl.	
20.	27.	3.	10	51	10	—	10	51	6	o 4 — Upfala.	
			10	53	9	—	10	52	46	o 23 — Stockh.	
27.	3.	3.	12	46	32	—	12	46	44	o 12 + Upfala.	
			14	25	0	—	14	24	48	o 12 — Lund.	

Observationes

Observationes comparatæ primi fatellitis Jovis.

Ann.	Temp. Observationis M. D.	Observationis			Im.	Calculus.			Diff. Calc.	Observatorium.	
		h	'	"		h	'	"			'
1774.	Sept. 3.	14	42	21	Im.	14	42	15	o 6	— Tyrnav.	
		15	33	29	—	15	33	17	o 12	— Petersburg.	
	10.	15	28	31	—	15	28	7	o 24	— Greenw.	
		16	38	28	—	16	38	19	o 9	— Tyrnav.	
	12.	9	57	14	—	9	57	13	o 1	— Greenw.	
		11	9	46	—	11	9	24	o 22	— Stockh.	
	21.	11	58	36	—	11	58	27	o 9	— Petersfb.	
		8	23	43	—	8	23	43	o 0	Petersfb.	
	26.	13	49	53	—	13	49	40	o 13	— Greenw.	
		13	59	42	—	13	58	58	o 44	— Paris. Cl.	
	Oët.	3.	15	46	19	—	15	45	47	o 32	— Greenw.
			15	55	45	—	15	55	5	o 40	— Paris. Cl.
		5.	16	58	31	—	16	57	58	o 33	— Stockh.
			10	24	45	—	10	24	8	o 37	— Paris. Cl.
11		25	9	—	11	25	2	o 7	— Tyrnav.		
		11	26	59	—	11	27	1	o 2	+ Stockh. d.	
12		16	5	—	12	16	4	o 1	— Petersfb.		
		17	41	57	—	17	41	43	o 14	— Greenw.	
12.		12	20	25	—	12	20	0	o 25	— Paris. Cl.	
14.		7	50	7	—	7	50	6	o 1	— Upfala.	
		7	52	0	—	7	51	46	o 14	— Stockh.	
19.		14	16	20	—	14	15	32	o 48	— Paris. Cl.	
21.		8	35	0	—	8	35	3	o 3	+ Greenw.	
		8	44	47	—	8	44	21	o 26	— Paris. Cl.	
26.	16	1	23	—	16	1	26	o 3	+ Greenw.		
30.	6	10	47	—	6	10	59	o 12	+ Stockh.		
Nov.	11.	17	19	3	Em.	17	18	53	o 10	— Lund.	
	13.	12	5	2	—	12	4	39	o 23	— Tyrnav.	
	15.	6	15	39	—	6	15	36	o 3	— Lund.	
		6	34	34	—	6	35	2	o 28	+ Stockh.	
	20.	12	56	42	—	12	57	3	o 21	+ Paris. Cl.	

Observationes

Observationes comparatæ primi fatellitis Jovis.

Ann.	Temp. Observationis.	Calculus.	Diff. Calc. Observatorium.
M. D.	h ' "	h ' "	' "
1774. Nov. 22.	8 27 22	Em. 8 28 10	o 48 + Stockh.
Dec. 6.	11 9 25	- 11 10 7	o 42 + Paris. Cl.
	12 11 9	- 12 11 1	o 8 - Tyrnav.
24.	4 52 25	- 4 52 47	o 22 + Stockh.
29.	11 3 48	- 11 4 32	o 44 + Greenw.
	12 14 15	- 12 15 3	o 48 + Upsala.
	12 16 11	- 12 16 43	o 32 + Stockh.
31.	6 25 5	- 6 25 17	o 12 + Lund.
1775. Jan. 23.	6 48 55	- 6 49 43	o 48 + Tyrnav.
Feb. 15.	5 53 2	- 5 53 32	o 30 + Greenw.
22.	7 49 37	- 7 49 59	o 22 + Greenw.
	8 42 39	- 8 42 44	o 5 + Lund.
	9 0 6	- 9 0 11	o 5 + Tyrnav.
	9 1 55	- 9 2 10	o 15 + Stockh.
Mart. 10.	7 23 51	- 7 23 53	o 2 + Tyrnav.
17.	8 11 7	- 8 11 21	o 14 + Greenw.
Jul. 15.	14 42 36	Im. 14 42 14	o 22 - Greenw.
24.	13 5 40	- 13 5 46	o 6 + Petersb.
Aug. 7.	14 53 55	- 14 53 26	o 29 - Greenw.
16.	13 18 25	- 13 18 29	o 4 + Petersb.
Sept. 1.	11 38 30	- 11 38 45	o 15 + Petersb.
15.	15 31 7	- 15 30 54	o 13 - Petersb.
24.	11 6 50	- 11 6 56	o 6 + Stockh.
Oct. 1.	11 50 3	- 11 50 36	o 33 + Greenw.
	13 3 2	- 13 2 47	o 15 - Stockh.
10.	9 27 23	- 9 27 20	o 3 - Stockh.
22.	17 37 1	- 17 36 25	o 36 - Greenw.
Nov. 2.	8 27 48	- 8 27 35	o 13 - Greenw.
18.	7 54 22	- 7 54 5	o 17 - Stockh.
Dec. 11.	10 6 5	Em. 10 6 34	o 29 + Stockh.
20.	6 23 33	- 6 23 37	o 4 + Upsala.

Observationes comparatæ primi satellitis Jovis.

Ann.	Temp.	Observationis			Em.	Calculus.			Diff.	Calc.	Observatorium.
		h	'	"		h	'	"			
1775.	Dec. 20.	6	24	55		6	25	17	0	22	+ Stockh.
	27.	7	3	6	-	7	4	9	1	3	+ Greenw.
		8	15	17	-	8	16	20	1	3	+ Stockh.
1776.	Jan. 12.	6	26	48	-	6	27	22	0	34	+ Stockh.
	19.	8	19	7	-	8	19	51	0	44	+ Stockh.
	26.	10	12	15	-	10	13	7	0	52	+ Stockh.
	28.	4	40	51	-	4	41	32	0	41	+ Stockh.
	Febr. 2.	12	6	20	-	12	7	7	0	47	+ Stockh.
	27.	6	51	5	-	6	51	33	0	28	+ Stockh.

