OBSERVATIONES ASTRONOMICAE

DISTANTIARUM A VERTICE,

ET

ADSCENSIONUM RECTARUM

STELLARUM QUARUMDAM INERRANTIUM

SOLIS ITEM, ET PLANETARUM,

QUAS

IN SPECULA BUDENSI MONTIS BLOCKSBERG

ET INSTITUIT, ET IN CALCULUM REVOCAVIT

DANIEL KMETH E S. P.

AA. LL. ET PHILOSOPHIAE DOCTOR, INSTITUTI ASTRONOMICI ADIUNCTUS, ET COMMEMBRUM FACULTATIS PHILOSOPHICAE REGIAE SCIENTIARUM UNIVERSITATIS PESTHIENSIS.

BUDAE,

TYPIS REGIAE UNIVERSITATIS HUNGARICAE.

1821.

ADMODUM REVERENDO, AC EXIMIO PATRI

MARTINO BOLLA

CLERICORUM REGULAR. SCHOLARUM PIARUM

PER HUNGARIAM, ET TRANSSILVANIAM

PRAEPOSITO PROVINCIALI,

VIRO

VIRTUTE, ET DOCTRINA CONSPICUO

CONSILIIS GRAVI, VITA AMABILI,

SUORUM PRAESIDI, ET PATRI EXOPTATISSIMO

HOS

IN ASTRONOMIA CONATUS

DEVOTUS AUCTOR DEDICAT.

ADMODUM REVERENDO, AC EXIMIO PATRI

MARTINO DOLLA

CLERICORUM REGULAR. SCHOLARUM PIARUM

PER VENETIAM, ET TRANSSILVANIAM

PRAEPOSITO PROVINCIALI,

VIRO

VIRTUTE, ET DOCTRINA CONSPICUO

CLEMENTES GRAVI, VITA AMICITIA,

SUORUM PIETATIS, ET PATRI EXOPTATISSIMO

HOS

IN ASTRONOMIA CONATUS

DEMUM AUCTOR DEDICAT.

Admodum Reverende, ac Eximie Pater Praeposite Provincialis!

Singularis prorsus, et paternus Tuus erga me animus, et multis elucens indiciis, factisque plurimis in me derivata benevolentia Tua, tum multiplex in scientiis omnis generis parta, editis etiam operibus manifesta, et a mundo erudito agnita rerum cognitio caussa fuit, ut hos recentioris Astronomiae in Hungaria fructus Tibi dedicarem. Pietatis profecto erga Te meae nullum possum adferre maius argumentum, quam si non verbis modo, sed factis etiam contestabor me partium mearum exsequutionem in votis ita semper habuisse, ut omnem impenderim operam, quo exspectationi Tuae, et conceptae de me opinioni quam optime responderem. Tu, qui Astronomiae scientiam inde ab incunabulis eiusdem per omnes aetates crescentem, et ad summum tandem florem perductam opere

Tuo

Tuo doctissimo ita evolvisti, ut eius non profundam solum cognitionem hausisse, sed ipsa etiam abdita penetravisse videare, coniicies facile ex hoc opusculo, quo nisu, quibus vigiliis opus fuerit et ad observationes tam numerosas brevi tempore instituendas, et ad eas superatis prius marte proprio difficultatibus in calculum vocandas. Quos publico bono consecratos conatus dum Tibi Admodum Reverende Pater Praeposite Provincialis summa cum veneratione offero, Te simul maiorem in modum exoro, ut me paterno, Tuo favore, quo mihi iam diu perfrui licuit, porro quoque complecti digneris.

In scientiis, prout hodie coluntur, neminem adeo rudem esse existimo, ut finem ignoret, in quem observationes Astronomicae instituuntur. Unicus hic est theoriae motuum corporum coelestium et comprobatio, et perfectio. Illis namque pro fundamento positis motus planetarum determinantur, tabulaeque, quarum ope situs illorum pro qvovis momento calculare liceat, aut conduntur, aut a naevis suis perpurgantur; unde suapte consequi fatendum, observationes in usum eiusmodi adhibendas perfectiores esse debere omnibus illis, quae ante nostram aetatem instituebantur. Perfectio vero ista non a solo observatore, sed in primis a perfecto machinarum observationi destinatarum adparatu petenda est, ita quidem, ut ab hoc omnis observationum valor aestimetur, tantumque his pretii ab Astronomis tribuatur, quantum perfectionis adparatui illi ab artifice tributum esse noverunt. Quodsi scientiam Astronomicam, quae priore seculo ad finem vergente, et hoc ineunte ad maximum florem perducta est, penitius contemplemur, fateri cogimur, institutas ante hoc tempus observationes theoriae in summo fere gradu collocatae minime respondisse, multisque adhuc passibus ab hac remotas ad eius culturam parum conferre potuisse. Dictum id esto non de Budensi solum vetere specula, sed de plerisque aliis, quae in omni ferme Europae provincia complures numerabantur, quae observationes factas libris intulisse ideo videntur, ut in praestantiorum penu-

rai

ria utiles essent, nomenque, et conatus observatorum posteritati commendarent. Una illa erat, antequam Panormitana, Gothana, Regiomontana exsurgeret, velut omnium ceterarum Regina Grenovicensis in Britannia specula, quae necessariis, finique suo adcommodatis organis provisa quasi leges dictabat, observationesque fide dignas Astronomis sive in condendis solis, Lunae, aliorumve Planetarum tabulis, sive in refractione determinanda, sive in lucis aberratione, axisque terrestris nutatione examinanda desudantibus suppeditabat.

Itaque ut necessitati tantae regna succurrerent, velut signo dato nova Uraniae templa erigere, ea aptissimis organis providere, et, quod ab aliis peti antea debebat, ipsi investigare coeperunt. Ita celeberrimi viri Piazzi Panormi, Baro de Zach Gothae, Oriani Mediolani, Gauss Göttingae, Bessel Regiomonti, aliique complures et scientiam astronomicam egregie percoluerunt, et sibi nomen immortale procuraverunt.

In Hungaria successu felicissimo omnis generis scientiae colebantur ita, ut se cultissimas Europae nationes aut adsequutam esse, aut multas antecessisse gloriari possit. Astronomia sola fuit, cuius cultura florem in aliis regnis iam productum lentis admodum passibus sequebatur. At nihil sub coelo est tam ardui, in quo vincendo natio Hungara et egregiorum ingeniorum feracissima, et adminiculorum ad quidvis praestandum abundantissima palmam sibi praeripi sinat. Quapropter ut scientiis astronomicis quam optime consuleretur, et vetus observatorium deserere, novumque exstruere, et hoc eliminatis antiquis organis novo prorsus, et perfecto adparatu organico dotare necessarium esse iudicavit, quo id et praestitutis finibus, et iustis in praesente scientiarum statu astronomorum votis plene responderet; quae omnia ad nutum Clementissimum Augustissimi Imperatoris, et Regis Hungariae Francisci I., atque sub peculiari protectione Serenissimi Caesareo-Regii Archiducis Josephi regni nostri Palatini et feliciter susceptа, et ita anno 1814. in monte Blocksberg Budae adsito praestita sunt, ut nova haec specula et situ suo, et copia organorum, selectuque

ante

ante alias sese distingveret, atque commune in omnibus desiderium excitaret, ut tanta Regis liberalitas, tantus Principis favor, tanta virorum illustrium cura, tantaeque sumtuum impensae redituris inde solatiis coronarentur.

Quo magis fama aedificatae, et organis ex officina celeberrimi nostra aetate artificis Reichenbach petitis provisae speculae percrebuit, eo maiorem conceperunt fiduciam et exteri, et Hungari ab ea nihil, nisi quod optimum, nisi quod numeris omnibus absolutum esset, exspectari posse, eoque magis Hungari, ut sunt de bono publico solliciti, et scientiarum amantissimi, documento quodam edoceri anhelabant, quid organa tam rara ad perfectionem Astronomiae conferrent, certi, gloriam erectae et tam liberaliter instructae speculae, quae Fundatoribus eiusdem propria est, tum solum integram futuram, quum hanc promerita ex usu, et fructibus laus comitabitur. At huic eorum voto, quantum memini, adhuc satisfactum non est. Interruptis enim identidem ob susceptas varii generis mutationes observationibus Astronomi tantopere aliis distinebantur, ut eos rei aedili magis, quam Astronomicae praeesse diceres. Ceterum existit typis procusum Diarium observationum, quae primis illico ab origine speculae annis institutae fuere, quod antequam lucem videat publicam, illas, quas ego et institui, et in calculum vocavi, hoc opusculo complexus sum.

Speculam, et adparatum eius organicum hoc loco describere supervacaneum existimo veritus, ne auribus benevoli Lectoris rem saepe auditam recoquendo molestiam facessam. Alioqui descriptio haec legi potest in scriptis periodicis: Tudományos Gyűjtemény anni 1817. Tom. VI. IX. Patrio idiomate copiosius deducta, et in Vaterländische Blätter für den Österreichischen Kaiserstaat An. 1819. Num. 21. 23. 24. in lingvam Germanicam traducta. De solis itaque observationibus paucas adferre animadversiones iuvabit.

Duplicis hae sunt generis, prout duplici instrumento factae fuere. Distantiae nempe a vertice Circulo verticali, et multiplicante, solatio illo Astronomi, et speculae decore mensuratae, et Adscensiones

rectae ope Culminatorii observatae. Utraeque sunt et stellarum inerrantium, et Solis, Planetarumque. Videamus primum Distantias a vertice.

Distantiae a vertice stellarum ad eruendam altitudinem poli supra horizontem primum, tum hac ad amussim determinata ad investigandas Astrorum declinationes observantur. Elevatio ergo poli supra horizontem elementum est, sine quo Astronomus nihil suscipere potest, quod ad eruendas absolutas declinationes serviat. Absolutas autem declinationes hic eas intelligo, quae nulla ullius Astronomi auctoritate nituntur, sed ex observatione distantiarum a vertice, et elevatione poli speculae suapte ita consequuntur, ut a detectis hactenus astrorum positionibus minime dependeant. Quare me etiam tacente facile intelligitur, quanta diligentia, quanta praecisione hoc declinationum fundamentum investigandum sit, quum error, qui in determinatione altitudinis poli committitur, omnibus illius auxilio stabiliendis declinationibus communicetur. Ceterum declinationes absolutae nec hac ratione obtinebuntur, nisi elevatio poli ab influxu eorum omnium, quae eruere primum oportebit, libera fuerit. Ad hoc duo potissimum requiruntur: absolutae distantiae a vertice, et usus earumdem sine hypothesi in eruenda poli altitudine. Quod prius adtinet, maximum apud Astronomos aetate nostra priores impedimentum erat adparatus eorum organicus certo errori obnoxius. Omne scilicet organum ad singulares altitudines, aut distantias a vertice adhibitum errori collimationis dicto, et in eo consistenti subiacet, quod nulla Mechanici arte obtineri possit, ut tubi sive circulo, sive quadranti adpliciti axis opticus per centrum eorumdem praecise transeat, quo fit, ut magis, aut minus astrum a vertice distare machina eiusmodi ostendat, quam reipsa in universo distet, prout axis ille vel infra centrum deprimitur, vel supra hoc elevatur. Facile quidem est errorem hunc detegere stellarum situs ab aliis determinatos cum observatis comparando, sed amittit observatio valoris nonnihil, quod auctoritati subiiciatur.

Neque circulus noster verticalis ab hoc errore liber est, sed praecipua perfectionis eius laus inde repetitur, quod error collimationis

ipsa

ipsa observatione tollatur adeo, ut quaevis illius ope facta observatio, nova in universo detectio dici mereatur. Collocato scilicet ad situm verticalem exactissime instrumento Tubus cum externo Circulo ad motum concitatus ad astrum observandum dirigitur, hoc ope fili horizontalis in tubo tensi scinditur, et illico distantia eius a vertice cognoscitur, sed dicto paullo ante errore adfecta, ad quem evitandum Astronomus facta una observatione circulum externum figit, soluto circulo interno totam machinam in partem priori oppositam convertit, contra astrum collimat, et distantiam eius a vertice alteram obtinet. Dupla haec distantia duplum includit errorem collimationis, sed signis contrariis adfectum, quod in parte altera minor, in altera eadem quantitate maior distantia mensuretur, medium ergo Arithmeticum omni errore eliso exactam distantiam prodet.

Obtentis eiusmodi stellarum a vertice distantiis ad determinandam poli altitudinem opus est, quod quidem factu facillimum est, quum singulae distantiae meridianae stellarum ad earum declinationes adplicatae, sola additione, aut subtractione elevationem poli supra horizontem producant. Sed declinationes, ut iam praemonui, obiectum sunt, quod Astronomo stabilita prius poli altitudine, omni studio investigandum superest. In hac igitur disquisitione abstinendum est illis, et liberior methodus ad inveniendam poli elevationem quaerenda. Methodum hanc omni ex parte securam suppeditant stellae Circumpolares dictae, quae, quod polo vicinae sint, in loco observationis nunquam occidere, sed tam supra, quam infra polum meridianum transire videntur, aliis infra horizontem invisam meridiani partem transgredientibus. Observata namque stellae eiusmodi tam supra, quam infra polum distantia a vertice ostendit directe poli altitudinem, quin declinationem eius, sensu nostro adhuc incognitam, in subsidium vocare necesse sit.

In hunc usum factae sunt per me observationes hoc in opusculo primum locum occupantes, quae qualem elevationem poli speculae nostrae suppeditent, videamus. β Ursae minoris, et γ Draconis ad

hoc

hoc eligere placuit in utraque culminatione observatas. Distantiis Zenithalibus observatis a Temperie, Aberratione, et Nutatione purgatis, atque ad meridianum, et ad initium anni 1819. reductis medium est

	β Ursae minor.						γ Draconis					
	supra Pol.			infra Pol.			supra Pol.			infra Pol.		
Distant. observ.	27°	23′	57.″86	57°	35′	28.″83	14°	26′	5.″20	70°	32′	22.″29
Refract. med.			31.42		1	35.19			15.59		2	50.05
Summa	27	24	29.28	57	37	4.02	14	26	20.79	70	35	12.34
	57	37	4.02							14	26	20.79
Dupl. alt. aeq.	85	1	33.30							85	1	33.13
Simpla	42	30	46.65							42	30	46.56
Altitudo poli	47	29	13.35							47	29	13.44

Haec de adproximata elevatione poli paucis dicta sufficiant; veram enim, quod non sine rubore dico, ignoramus ob defectum copiosarum observationum; quae spatio sex annorum quare institutae non sint, facilius est Lectori benevolo ex adiunctis coniicere, quam mihi verbis proferre. Ad veram altitudinem poli velut pars ad totum refractio refertur, quae quoniam extra dubium necdum posita est, illam tunc tantum obtinebimus, quum hanc ex innumeris, et in diversa supra horizontem altitudine institutis observationibus elicitam ad distantias observatas adplicare poterimus.

Declinationes stellarum ex observationibus derivare est res omnium facillima. Vel enim Distantia observata, prout res postulat, correcta ab elevatione poli, vel haec ab illa subtrahitur, et residuum declinationem indicabit borealem primo, australem altero casu astri in parte meridionali verticis positi. Ceteras inter memorari hic merentur declinationes solstitiales Solis, seu obliquitas Eclipticae, quae pariter e distantiis a vertice eruuntur. E meis ternis in solstitio hiberno anni 1818. factis observationibus adhibita propria Adscensione recta haec fluit Eclipticae obliquitas in hypothesi elevat. poli 47 gr. 29. min. 13. sec.

21. Dec.

	21. Dec.			23. Dec.			24. Dec.		
Declin. solis	23°	27′	37″.05	23°	27′	35.91	23°	62′	50″.47
Red. ad. solstit.			12.51			15.95		1	0.19
Obliq. Eclipt.	23	27	49.56	23	27	51.86	23	27	50.66

Quod iam bonitatem observationum, e qua bonitas organorum sequitur, concernit, eam Astronomi ut plurimum e mutua inter se, et cum coelo conformitate aestimant, nisi locus dubitandi adsit, machinam ad observandum adhibitam errori alicui constanti subiacere. Quaenam sit in sequentibus observationibus conformitas, uno obtutu in distantiis α Ursae minoris perspici potest. Singulares profecto hae sunt, et Circulo Reichenbachiano dignae observationes, illi soli in acceptis referendae, qui ingenio suo, et dexteritate machinas ad eum perfectionis gradum adduxit, ut singula fere in coelo secunda et videre, et metiri liceat. Illud autem, quod observationes hae, ut patet, diversis annis, diversis anni partibus, subque diversa aeris temperie, et circulo interea identidem soluto, et rursus composito factae fuerint, indicio esse potest eumdem ab errore constante liberum esse. Occurrunt quidem observationes nonnullarum stellarum plusculum a se invicem discrepantes, sed quis id miretur, qui virium naturae gnarus tam multiplicium rerum in machinam metallicam agentium influxum expendit? quae nec in manu artificis, nec in potestate observatoris positae sunt. Illae nubeculae epidermidis ad instar tenues, quae in superiore coeli regione resident, illique lacteum quemdam colorem inducunt, illa subtilis nebula, quae non illico terrae superficiem lambit, sed altius sublata aeri innatat, illa varia in diversis stratis aeris temperies totidem sunt caussae, quae refractionem inaequalem reddunt, et sic bonitati observationum multum officiunt. Sane per diversam aeris temperiem non lucis tantum radiorum, sed et ipsius instrumenti directionem turbari nullus est, qui dubitet. Expanduntur enim calore corpora, frigore constringuntur, utrumque ergo peragitur, ubi pars corporis altera a frigore, a calore altera adlambitur, idque eo inaequalius, quo maius inter utramque temperiem discrimen interest. Optandum eapropter esset, ut observatio-

tiones sub aperto coelo fierent, ubi nec lucis radii prout nunc speculam ingredientes refringerentur, nec organum in aequilibrio cum aere externo existens ab accepta directione dimoveretur; quod quia fieri nequit, curandum esset opinione mea, ut temperies interna quam proxime ad externam accedat.

In specula nostra, quae novem supra triginta ianuis providetur, malum hoc fortasse, quam alibi, maius est. Arcetur enim aer externus adeo, ut ei nonnisi tunc, dum ad observandum acceditur, ingressus pateat. Tum vero quanta aeris fiat confusio, oculis distingvi potest. Ceterum opinio haec est mea, nec ea pertinax; plura experti Astronomi alius sententiae esse possunt.

Solis in primis observationes incommodum istud persentiscunt. Irruentibus enim per apertas valvas eius radiis, quum nullum adsit umbraculum, pars tantum Circuli illuminatur, calefit, expanditur, pars alia in umbra haeret, situmque suum vel tuetur, vel modo opposito inflectitur. Fortasse inaequali huic inflexioni adtribuenda est pars aliqua illius anomaliae, quae inter obliquitatem Eclipticae hibernam, et aestivam passim observatur. Non temere istud, sed propria fultus experientia adsero. Anno enim 1818, quum hiemale solstitium negligere nollem, tam distantiam Solis a vertice Circulo, quam eius Adscensionem rectam Culminatorio observavi. Capta videlicet distantia Solis antemeridiana ad culminatorium nonnihil remotum cucurri Adscensionem rectam observaturus, qua obtenta ad circulum reversus coeptam operationem continuavi sed eo effectu, ut eruta inde solis declinatio reliquis aliquanto minor prodiverit, ut e Tabularum errore Solis observationibus adiecto manifestum est. Prorsus idem experiri in aequinoctio licuit, meque in ea opinione confirmavit, quod Circulus sex minutorum spatio a sole illustratus, inaequaliter expansus, et ab accepto situ dimotus fuerit. Libellam hoc in casu pro correctione situs verticalis adhibere non tantum non iuvat, sed etiam perniciosum est. Spiritus enim vini subtile corpus actionem caloris, quam aes citius persentiscit, et qua fluidum citius ad motum concitatur, quod facile admittent ii,

qui

qui eam vel solo halitu ad motum sollicitari experti sunt. Fortasse inde etiam repeti potest difformitas illa Noniorum, quae non raro intensa omni oculorum acie in Circulo animadvertitur, qui tamen alias aut optime consentiunt, aut paucis admodum secundis differunt.

In constructione porro sequentium tabularum id ante omnia prae oculis habui, ut observationes non nostro tantum tempori, sed sequuturae etiam aetati usui essent. Quapropter, quae calculo trigonometrico evidentia sunt, ea ut semper valitura adnexui, ceterorum vero nihil praetermisi, quae ad faciendam distantiarum a vertice adparentium in veras conversionem desiderantur. Id data opera factum est, ut, quibus usus harum observationum gravis futurus non est, et meliora elementa, siquae norunt, substituere, et naevos, siqui in calculum irrepserunt, facile detegere, et emendare valeant. Refractio sola deest multis adhuc dubiis involuta. Observationes igitur stellarum, quas fixas, inerrantes nominamus, novem columnis constant. Prima annum, mensem, et diem civilem nempe a media nocte computatum exhibet. Secunda distantiam a vertice crudam, seu prout observata fuit, indicat. Et quia distantia haec non in meridiano ipso, sed paullo ante, vel post illum observabatur, tertia columna continet correctionem illi ad meridianum reducendae consentaneam. Porro refractio prout in diversis supra horizontem altitudinibus diversa est, ita nec in eadem altitudine invariata manet, sed pro ratione densitatis aeris, et eius temperiei mutationem subit, seu, quod idem est, a diversa mercurii in Barometro, et Thermometro expansione dependet. Columna quarta itaque correctionem hanc sub nomine Temperiei complectitur, et sicut refractionem, ita observatam a vertice distantiam vel auget, vel minuit. Quinta columna praecessio aequinoctiorum exprimitur, cuius ope observationes ad epocham primae Ianuarii anni 1819. reducuntur, quasi hac die omnes institutae fuissent. Sequitur in columna sexta Aberratio lucis, et in septima Nutatio axis terrestris. In octava distantia stellae a zenith omnibus dictis correctionibus emendata, et refractione duntaxat media adfecta comparet, qua igitur sola opus erit, ut in veram con-

ver-

vertatur. Nona denique columna conversiones Circuli observationis tempore factas designat.

In Solis observationibus praeter reductionem ad meridianum mutatiuncula declinationis certo angulo horario competente correctam, Temperiem, Parallaxim, Refractio etiam e meis tabulis secundum theoriam La Place constructis depromta occurrit, quibus ad observatam distantiam Zenithalem adplicatis, positaque pro fundamento elevatione poli rotundo, ut aiunt, numero sumta 47 grad. 29. min. 13. sec. Declinatio Solis adparens a nutatione adhuc pendens fuit eruta, corrigenda utique, ubi poli altitudo vera innotuerit. Ut vero de factis observationibus iudicium illico ferri possit, singulis observationum temporibus convenientes e Tabulis De Lambre declinationes calculo erui, has cum meis comparavi, et differentiam, errorem Tabularum vulgo dictam, atque columnae penultimae insertam detexi.

In reliquis Planetarum observationibus distantia extra meridiana ope reductionis in meridianam traducta, et per veram refractionem correcta declinationem adparentem dedit per parallaxim adhuc, aberrationem, nutationemque corrigendam. Sciendum vero tam solis, quam Planetarum centri distantias esse sumtas, non immediate, sed limbos reciproce sumendo, nisi contrarium in diario adnotandi oblivio caussa fuisset. Et haec de distantiis a vertice dicta sufficiant.

Alteram opusculi huius partem efficiunt observationes Adscensionum rectarum Culminatorio institutae. Et quidem primo loco se offerunt ter mille ducentae triginta observationes 147 Stellarum inerrantium, tum quingentae quadraginta septem Solis, et Planetarum, quas inde a secunda Augusti Anni 1818. usque ad vicesimam octavam Junii anni 1819. quo tempore mihi Instrumento hoc uti licebat, institui. Observationes hae utut simplicissimae, et facillimae esse videantur, sunt tamen innumeris, iisque opinione maioribus difficultatibus implicitae.

Ad rectum enim huius organi situm sequentia potissimum requiruntur. 1. Ut axis rotationis Tubi ad horizontem parallelus sit. 2. Ut

radius

radius visualis, seu linea collimationis, alias linea fiduciae dictus axi illi verticaliter immineat, et filum reticuli medium in directione huius lineae iaceat. 3. Ut filum hoc, proinde et radius visualis in planum meridiani adducatur.

Ad collocandum Tubi axem ita, ut horizonti parallelus evadat, servit libella pensilis duabus ansis in fine ad angulum desinentibus praedita. Adpenditur libella haec axi tubi ita, ut unci angulares politos axis cylindrulos, quorum ope rotatio peragitur, quodammodo ambiant. Si axis tubi reipsa horizontalis est, bulla aerea medium libellae occupabit locum, alioqui axem adtollendo, aut deprimendo tamdiu dirigenda, dum perfecte in medio consistat. Verum id tunc tantum obtinet, quum certum est, cavitates internas uncorum ab axe libellae aeque distare. Ad tollendum itaque omne dubium ex parte adversa culminatorii libella ita adplicatur, ut uncus, qui prius orientem respiciebat, nunc ad occidentem veniat. Quo facto, si bulla se ad medium componat, horizontalem axis situm indicabit, quodsi non, hunc cum horizonte angulum formare patebit ab indebito situ tam libellae, quam axis pendentem. Pars igitur erroris media axis, pars altera ipsius libellae mutatione corrigetur, repeteturque conversio ista tamdiu, donec adpensa ex parte utraque axi libella bullam aeream in medio quiescentem obtinuerit. Hac ratione evincitur quidem axem culminatorii horizonti parallelum esse, sed argumento ab ea hypothesi petito, quod cylindruli chalibei, quibus libella adpenditur, perfecte rotundi e manu artificis prodiverint, aut si non, quod unci libellae post factam eius in partem adversam conversionem, prorsus eadem, quae antea, e quibus pendeant, puncta occupent.

Radius porro visualis per focos lentis obiectivae, ocularis, et per medium filum, quod meridiani vices gerit, transire debet. Primum praestare Mechanici officium est, alterum Astronomi. Ut methodum astronomicam nonnihil incommodam silentio praeteream, solam mechanicam commemorabo, aeque, ac illa sit, tutam. Quaeritur nempe in terrae superficie punctum quoddam lucidum, quod filo meridiano distincte

***

bis-

bissecari potest, si converso in partem alteram tubo idem punctum bissectum manet, filum medium cum axe optico tubi consentiet, secus correctione adminiculo totius tubi, et motu reticuli facienda opus erit. Liceat mihi pauca hic animadvertere. Tubus noster meridianus secundam iam habet lentem obiectivam priori a Reichenbach substitutam. Qui ideam axis optici habent, per quem distinctissima obiecti imago efformatur, non improbabunt opinionem meam, qua duas remotas lentes ad situm parallelum deducere, earumque focos mutuo radio visuali coniungere difficile esse existimo. Subiicio caussam. Tubus noster meridianus ita constructus est, ut lens ipsius ocularis pro immobili haberi possit, utpote tubulo, qui aequabili directione alteri inscritur, inclusa. At lens obiectiva annulo aurichalcino helicibus intersecto imposita Tubo interebratur, quae helices quum obliquae esse debeant, omni revolutionis helicum spatiolo radium visualem a via debita alio detorquent, nec ad congruum situm adducunt, nisi signum aliquod, quod artifex pro directione adnotavit, adpareat. Ad haec, quod ambo disci lentem obiectivam constituentes ab invicem identidem separati, et deterso humore rursum repositi fuerint, dubitandi locus est, num illi situm eum obtinuerint iterum, quem eis olim artifex adsignaverat.

Collocati ita tubi axis opticus circulum quidem maximum in coelo describet, quin tamen hunc meridianum esse certum futurum sit, quum fieri possit, ut tubus ita collocetur, ut circulus eius revolutione in coelo descriptus meridianum in puncto aliquo intersecet, observationesque eo institutas alias maiores, minores iusto alias subministret. In eo itaque cardo rei vertitur, ut dictus tubi radius visualis planum meridiani durante tota revolutione teneat. Ad hoc investigandum utiles essent altitudines Solis correspondentes cum observationibus Culminatorii comparatae, nisi notum esset, hunc medio indigere anno, ut e maxima sua altitudine ad minimam delabatur. Astronomi itaque adhibent hunc in usum media, quae quovis die praesto sunt. Sunt nempe stellae fixae in diversis supra horizontem altitudinibus sitae, et nostra aetate bene determinatae. Harum itaque complures Culminatorio

ob-

observantur et vertici, et horizonti vicinae, quae a lucis aberratione, et axis nutatione immunes factae cum illis, quae e fixarum catalogis desumtae, et pro momento observationis calculatae sunt, conferuntur. Quodsi obtenta hinc differentia in omnibus aut exacte, aut proxime aequalis sit, tubum Culminatorii inde ab horizonte usque ad verticem in plano meridiani persistere indicium erit, deviabit secus ab hoc plano vel ortum, vel occasum versus, prout observata tempora excerptis e catalogo minora, vel maiora deprehendentur. Verum adcuratis ad hoc observationibus opus est. Quis vero est observandi tam peritus, qui de duabus decimis unius secundi partibus certo caveat? Hanc rem, etiamsi quis hoc in genere nunquam versabatur, facile perspiciet. Observantur nempe in reticulo Culminatorii transitus stellarum per fila, qui eo momento raro eveniunt, quo secundum aliquod horologii minutum integre completum est, sed desiderantur ut plurimum ad hoc, vel superfluunt partes eiusdem aliquot decimae, quas observator ita computat, ut spatiolum, quod stella intra unum secundum in tubo percurrit, in decem partes mente dividat, et inde, quotnam elapso secundo decimae adiiciendae sint, concludat. Nihil proinde vero similius est, quam hic errorculum paucarum decimarum committere, qui si in duabus stellis modo opposito committatur, duplus efficitur, tubumque a plano meridiani dupla hac distantiola aberrare falso indicabit. Quare Astronomus in tam subtili re viam tutiorem sequitur. Dux huius α Ursae minoris est, sine quo vacillant plerumque observationes culminatorio factae, suumque pretium adeo imminuunt, ut nisi tunc evadant completae, dum per observationem Stellae polaris tanquam cynosuram comprobantur. Observatur ergo et quam diligentissime haec Stella, et quam fieri potest, frequentissime tam in sua supra polum, quam elapsis duodecim horis infra polum culminatione, eruiturque e binis his eiusdem diei observationibus spatium illud, quo Tubus a plano meridiani devians ad verum situm reducendus erit. Intelligitur autem per se motum diurnum horologii adprime noscendum, et eius rationem in dicto calculo

habendam esse. Molesta quidemest huius stellae observatio, quod ob exiguum suum circulum diurnum uno supra quinquaginta minutis primis apud nos opus sit, ut septem reticuli fila percurrat, sed amplissimo, et securissimo eius usu omne fatigium compensatur. Raro vero evenit, ut Astronomo utramque supra, et infra polum culminationem observare liceat, quod pauci in anno sint dies, quibus coelum nubibus non obtegatur. Hoc in casu aliae stellae circumpolares vel inter se, vel cum polari ita sumendae erunt, ut alterius inferior, superior culminatio alterius observetur, nam et hae eadem prorsus ratione adhibitae Tubi deviationem eo adcuratius prodent, quo minus a stella polari in declinatione aberunt.

Ceterum non est absolute necessarium, ut Culminatorium in plano meridiani quam exactissime collocetur; ex inventa enim deviatione facili negotio eruuntur correctiones, quibus observationes aliarum stellarum singillatim sumtarum, quasi hae in ipso meridiano institutae fuissent, emendantur: illis autem, qui Adscensiones rectas ex observatis differentiis deducunt, plane nulla correctione opus est, dummodo tubus ab accepto semel situ non recedat, quod ultimo animadvertendum superest.

Tubus noster meridianus, nam de hoc mihi sermo est, non ita semper satisfecit exspectationi meae, prout conatus, et bene factarum observationum conscientia exoptabat. Saepe situm longo tempore tenaciter retinuisse, aliquando nonnihil deviavisse, et rursus ad priorem locum velut regressum esse deprehendebatur. Ergo et hic vacillatio illa, de qua tot plurium Astronemorum querimoniae! Sed unde repetenda? Culminatorium nostrum sustentant pilae marmoreae et magni voluminis, et ponderis tanti, ut superflue potius, quam minus firmae dici possint, petrae primum, tum solido lapideo fundamento superpositae. His motum aliquem adsignare nimium esset. Alibi ergo qaaerendus. Ex adlatis superius, dum de circulo disserebamus, caussis, perspicuum est, quam facile organum quodvis sola aeris diversi, aut Solis radiorum actione in situ suo turbari possit. Illis isthic silentio praeteritis conii-

cia-

ciamus oculos in partes Culminatorii, earumque mutuam cum toto cohaesionem. Ad recipiendos axis Culminatorii chalibeos cylindros est adparatus quidam, qui canaliculos metallicos continet, in quibus rotatio axis peragitur. Adparatus ille tabulae primum e ferro fusae ope vertebrarum adstringitur, haec vero pilae marmoreae excavatae imposita contra omnes nutus clavis defenditur. Sed quod distantia pilarum in prima collocatione praecise non successerit, et nonnihil maior sit, quam axis tubi postularet, vertebrarum capita adparatum illum ferreae tabulae non ita adstringunt, ut unum corpus efficiant, sed interpositis annulis ab invicem separantur. Quid est ergo vero similius? motumne tam solidarum pilarum, an vertebrarum, consequentur et cheloniorum, quae totum tubum post se trahunt, ab hypomochlio remotorum sive a pondere tubi, sive ab expansione metalli ortam mutationem admittere? Profecto si celeberrimo Ramsden suspicari licuit, ipso ponduculo, quod perpendiculo adpendebatur, induci in totum telescopium variationem, metui apud nos potest inflexio prominentium vertebrarum e quacunque demum caussa oriunda. Interim non omnes tubi a meridiano deviationes huic sunt caussae adsignandae; eximendae sunt in specie illae, quae sive ex ignorantia, sive ex malitia hominum proveniunt: nam quod undecima mensis Junii anni 1819. ad tria ferme secunda Culminatorium a situ suo dimotum deprehenderim, non memoratis hucdum caussis adscribo, sed id opus manuum humanarum esse iudico.

Comparatis ita omnibus, quae ad rectum Culminatorii situm requiri sciebam, ex factis observationibus Adscensiones rectas medias quarumdam stellarum inerrantium depromsi quinque ad id correctionibus usus. 1. pendet ab inaequali distantia fllorum reticuli a medio. Quum enim observatio in septem filis fiat, et haec ad medium tanquam meridianum reducantur, aequalis autem eorum a medio distantia supponi non possit, e multis polo vicinae stellae transitibus distantia haec cognosci, et inde cuiusvis astri declinationi respondens correctio adhiberi debet. E sexaginta quinque stellae polaris Culminationibus distantias filorum reticuli aequatoreas a medio erui

I.	II.	III.	V.	VI.	VII.
44″.66	29″.65	14″.80	14″.75	29″.53	44″.26

2. Adscensiones rectas, non ut antiquis mos erat, per comparationem, sed directe ex observationibus elicui. Quem in finem deviationem tubi ope stellae polaris, aut aliarum circumpolarium detectam, perque factorem cuiusvis stellae declinationi congruum multiplicatam ad observationum tempora adplicui, hacque ratione easdem, si extra meridianum factae fuerunt, ad hunc revocavi, et facta cum praecipuis stellis, praesertim quae Maskelynianarum nomine veniunt, collatione reductionem horologii ad tempus siderale determinavi.

3. Reductione hac, motuque horologii cum competente signo ad tempus horologii adplicitis hoc in siderale converti vicinas plerumque stellas adhibendo, quod saepe difformitatem quamdam in motu horologii adverterim.

4. Restabat, ut ita obtentae Adscensiones adparentes in medias abirent, quod factum est Aberrationem, et Nutationem, quas e tabulis in meos usus compositis potissimum excerpseram, cum signis oppositis adhibendo.

5. Denique ut et conformitas singularium observationum facile dispiceretur, et usus Adscensionum rectarum commodior esset, adminiculo praecessionis annuae, motusque stellarum adhuc cogniti observationes singulas ad initium Anni 1819. reduxi.

Tabula his adiecta Adscensiones rectas medias exhibet, prout eae ex observationibus omnibus in unam summam conflatis per medium Arithmeticum derivatae sunt.

Adscensiones rectas Solis, et Planetarum eodem artificio ex observatis depromsi temporibus in spatium conversas, verum hae non mediae, sed adparentes sunt. Notandum Adscensiones rectas centrorum esse. In sole quidem ex observatis utriusque limbi per fila transitibus centri culminatio immediate sequebatur. In Planetis, quos nullas phases pati videmus, ita rem institui, ut limbi unius ad priora fila reticuli, alterius ad posteriora adpulsus observarem, qua methodo et diametrum planetae horizontalem determinavi, et per hanc observationes ad centrum reduxi.

Ad

Ad definiendum speculae nostrae situm superius solam altitudinem poli, seu latitudinem adtulimus; haec una directio locum non determinat, nisi longitudo eiusdem noscatur. In hunc finem adnexui observationes meas occultationum stellarum per Lunam, Solisque, et lunae eclipsium, e quibus longitudo observatorii nostri a meridiano Parisino computata 1. hor. 6. min. 51. sec. in tempore, seu in spatio 16. grad. 42. min. 45. sec. quam proxime deducta est, quae cum elevatione poli combinata punctum illud designat, quod specula in superficie telluris reipsa occupat.

Postremo in eorum gratiam, qui meteorologicis observationibus delectantur, harum etiam decem annorum lapsu institutarum compendium addere placuit. Continet hoc statum Barometri e singulis mensibus per medium elicitum, et incorrectum, quem excipit status thermometri interni ad corrigendam mercurii altitudinem necessarius, tum sequitur aeris externi temperies media, et in columna proxima status thermometri libero aeri expositi maximus, vel minimus.

Ad annum usque 1818. exclusive instituebantur hae observationes in specula antiqua, reliquae in nova. Ex comparatione plurium discrimen duarum linearum, et unius decimae interesse inter utramque deprehendi, qua correctione adhibita, relatisque ad speculam novam omnibus observationibus, erit in eadem

Status medius

Barometri	Therm. int.	Therm. ext.
$27^{P}\ 4^{l}.62$	$+\ 9^{\circ}.4$	$+\ 8.2$

quodsi ab expansione mercurii per calorem producto liberetur, erit altitudo columnae mercurii in Barometro media 27. poll. 3.9 lin. mensurae Parisinae.

E comparatione meteororum haec licet proxime vera deducere consectaria: Apud nos 91 diebus per annum pluit, 28 ningit, 50 nebu-

la

la est, 95 coelum nubibus totum obtegitur, vento NWgW et frequentissime flante, et atrocissime furente.

Atque haec sunt, quae diariis nostris hucdum abdita in publicum proferre volui suffectura Lectori benevolo ad coniiciendum, me id semper egisse, quo Patriae meae utilis essem, et ad obtinendum erectae speculae scopum pro viribus collaborarem. Animus sane laborandi nunquam defuit, sed in exsequutione officii adeo impediebatur, ut haec ipsa, quae opusculum complectitur, velut furto de coelo sublata existimem. Utpote tam iniqua erant, rerum, et personarum adiuncta, ut non quidvis, quod utile esset, observare, sed serius nec adparatum organicum contingere, immo demum nec ipsa speculae penetralia subire concederetur.

Dabat in monte Blocksberg
prope Budam 18. Februarii 1821.

Auctor.

OBSERVATIONES

DISTANTIARUM A VERTICE

STELLARUM QUARUMDAM INERRANTIUM

CUM CALCULO EARUMDEM.

OBSERVATIONES

DISTANTIARUM A VERTICE

STELLARUM QUARUMDAM INERRANTIUM

CUM CALCULO EARUMDEM

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
α URSAE MINORIS SUPRA POLUM								
1816 Julii 22	40° 49′ 23.″10	1.″25	— 4.″79	+47.″55	+19.″22	+ 5.″97	40° 50′ 29.″80	10
24	49 22.65	0.96	— 4.84	+47.45	+18.92	+ 5.97	29.19	10
25	49 23.40	1.20	— 5.08	+47.40	+18.77	+ 5.97	29.26	12
Aug. 9	49 26.21	1.20	— 4.39	+46.59	+16.51	+ 5.93	29.65	10
10	49 26.85	1.56	— 4.59	+46.54	+16.40	+ 5.93	29.57	12
Oct. 4	49 43.32	0.68	— 3.27	+43.60	+ 0.41	+ 5.67	29.05	8
19	49 48.42	0.29	— 2.28	+42.81	— 5.13	+ 5.58	29.43	6
1820 Jan. 14	51 10.50	0.32	+ 0.63	—20.11	—19.69	— 1.63	29.38	8
15	51 9.63	0.27	+ 1.12	—20.17	—19.62	— 1.64	29.05	8
24	51 12.28	0.61	— 0.91	—20.64	—18.76	— 1.67	29.49	8
Oct. 2	51 9.28	0.31	— 4.00	—33.97	+ 1.39	— 3.32	29.07	8
5	51 8.62	0.32	— 3.13	—34.13	+ 0.34	— 3.35	29.03	8
6	51 9.69	0.28	— 2.91	—34.18	— 0.01	— 3.37	28.94	8
Dec. 22	51 30.63	0.21	— 0.30	—38.29	—19.63	— 3.80	28.40	6
29	51 31.25	0.20	+ 0.52	—38.66	—19.97	— 3.86	29.08	6
30	51 31.12	0.57	+ 0.27	—38.71	—20.01	— 3.88	28.22	2
1821 Jan. 15	51 34.75	0.23	— 1.47	—39.69	—19.54	— 3.95	29.87	6
20	51 34.13	0.25	— 0.84	—39.96	—19.16	— 3.97	29.95	8
23	51 34.62	0.14	— 0.70	—40.11	—18.69	— 3.97	31.01	6
24	51 34.50	0.59	— 0.35	—40.16	—18.62	— 3.97	30.81	6
26	51 33.67	0.11	— 1.01	—40.26	—18.36	— 3.97	29.96	6
28	51 33.04	0.08	— 0.89	—40.36	—18.09	— 4.02	29.60	6
29	51 33.17	0.10	— 1.08	—40.41	—17.85	— 4.03	29.70	6
η URSAE MAJORIS INFRA POLUM								
1820 Dec. 22	82 11 29.29	4.81	— 3.87	—35.90	—14.10	— 5.32	82 10 34.91	6
29	21.12	5.28	+ 4.56	—36.25	—15.31	— 5.27	34.13	6
1821 Jan. 20	41.83	3.56	— 7.78	—37.34	—17.82	— 5.47	36.98	6
23	42.58	3.16	— 6.76	—37.49	—17.88	— 5.47	38.14	6
24	26.67	12.43	— 2.66	—37.54	—17.90	— 5.47	35.53	6
27	40.92	3.80	— 7.81	—37.69	—17.95	— 5.51	35.75	6
28	40.91	2.26	— 6.67	—37.74	—17.97	— 5.52	35.27	6
29	44.75	2.10	— 8.85	—37.79	—17.99	— 5.52	36.70	6

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
β URSAE MINORIS SUPRA POLUM								
1820 Jan. 9	27° 23′ 20.″13	1.″48	+ 0.″90	+14.″83	+18.″01	+ 5.″96	27° 23′ 58.″35	4
15	21.66	4.07	+ 0.88	+15.07	+18.84	+ 6.05	58.43	8
Febr. 13	28.67	11.88	— 0.56	+16.22	+19.92	+ 6.16	58.53	6
14	19.41	5.22	— 0.03	+16.26	+19.86	+ 6.16	56.44	8
15	27.78	13.86	+ 0.10	+16.30	+19.80	+ 6.16	56.28	8
1821 Jan. 12	9.37	3.79	— 1.76	+29.50	+18.60	+ 7.59	59.51	6
13	5.21	1.72	— 1.56	+29.54	+18.72	+ 7.67	57.86	6
14	4.54	1.91	— 1.37	+29.58	+18.84	+ 7.67	57.35	6
16	10.17	7.18	— 0.71	+29.65	+19.09	+ 7.60	58.63	6
20	2.58	1.82	— 0.13	+29.81	+19.57	+ 7.62	57.63	6
23	2.29	1.86	— 0.10	+29.93	+19.75	+ 7.62	57.63	6
26	4.58	3.28	— 0.42	+30.05	+19.93	+ 7.62	58.48	6
28	2.08	2.17	— 0.24	+30.13	+20.02	+ 7.64	57.46	6
29	2.00	2.20	— 0.29	+30.17	+20.08	+ 7.65	57.41	6
β URSAE MINORIS INFRA POLUM								
1816 Sept. 16	57 34 27.55	14.25	— 5.60	+33.22	+15.67	+ 2.71	57 35 27.80	10
17	34 24.45	16.82	— 6.34	+33.18	+15.46	+ 2.69	26.26	10
18	34 31.67	12.40	— 6.89	+33.14	+15.26	+ 2.67	28.25	12
21	34 31.51	10.23	— 5.69	+33.03	+14.64	+ 2.62	26.34	10
Oct. 4	34 34.80	11.91	— 5.62	+32.50	+11.92	+ 2.56	28.07	12
9	34 38.79	8.96	— 4.68	+32.31	+ 9.76	+ 2.55	27.69	10
10	34 38.30	9.76	— 4.48	+32.27	+ 8.85	+ 2.54	27.24	12
15	34 42.38	6.58	— 4.06	+32.08	+ 7.90	+ 2.49	27.37	10
17	34 39.38	9.92	— 3.41	+32.00	+ 7.24	+ 2.48	27.61	10
18	34 34.54	14.80	— 3.40	+31.96	+ 6.90	+ 2.48	27.28	10
20	34 45.67	7.05	— 4.61	+31.89	+ 6.24	+ 2.45	28.69	6
1820 Jan. 13	36 1.58	2.35	+ 2.94	—15.02	—18.60	— 5.95	27.30	6
14	36 4.06	2.68	+ 1.57	—15.06	—18.72	— 5.95	28.58	8
15	36 2.92	2.75	+ 2.26	—15.10	—18.84	— 5.95	28.04	6
24	36 10.59	2.21	— 1.61	—15.45	—19.75	— 6.05	29.85	8
25	36 6.97	2.05	0.00	—15.49	—19.81	— 6.05	27.65	8
Dec. 22	36 18.67	1.50	— 0.90	—28.62	—14.34	— 7.53	28.78	6
29	36 18.33	1.57	+ 1.23	—28.90	—16.03	— 7.55	28.65	6

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
β URSAE MINORIS INFRA POLUM								
1821 Jan. 20	57° 36′ 26.″83	1.″73	— 1.″53	—29.″81	—19.″64	— 7.″62	57° 35′ 29.″96	6
23	36 26.91	1.32	— 1.38	—30.08	—19.64	— 7.62	29.51	6
24	36 26.75	1.44	— 0.64	—30.17	—19.81	— 7.62	29.95	6
26	36 28.41	1.26	— 1.58	—30.35	—19.96	— 7.62	30.16	6
27	36 29.58	0.94	— 1.48	—30.39	—19.99	— 7.64	31.02	6
28	36 29.58	0.99	— 1.30	—30.43	—20.05	— 7.65	31.14	6
29	36 29.62	1.22	— 1.59	—30.47	—20.11	— 7.65	31.02	6
1821 Febr. 11	36 28.42	1.25	— 2.29	—30.68	—20.05	— 7.67	28.98	6
12	36 30.00	0.90	— 1.77	—30.72	—19.99	— 7.69	30.73	6
13	36 30.17	0.90	— 1.91	—30.76	—19.89	— 7.69	30.82	6
14	36 29.58	1.57	— 2.73	—30.80	—19.83	— 7.69	30.10	6
15	36 28.81	1.13	— 1.56	—30.84	—19.77	— 7.69	30.08	6
α PERSEI SUPRA POLUM								
1820 Jan. 14	1 44 28.75	43.19	+ 0.03	—13.94	—11.45	— 6.59	1 43 13.21	2
1821 Jan. 23	3.25	5.62	— 0.02	—27.77	—11.40	— 8.08	10.36	2
28	14.75	14.80	— 0.02	—27.95	—11.24	— 8.11	12.63	2
α PERSEI INFRA POLUM								
1820 Febr. 13	83 9 55.25	8.11	— 8.54	+15.05	+10.19	+ 6.78	83 10 26.84	6
14	46.37	5.93	+ 0.75	+15.08	+10.09	+ 6.78	25.00	6
1821 Jan. 26	48.58	3.03	— 8.38	+27.87	+11.32	+ 8.08	30.50	6
28	44.00	2.85	— 3.58	+27.94	+11.26	+ 8.11	30.58	6
29	39.75	2.57	— 4.54	+27.99	+11.23	+ 8.12	26.11	6
α URSAE MAIORIS INFRA POLUM								
1816 Jul. 17	69 43 10.77	23.77	—14.76	+47.14	+15.16	+ 7.36	69 44 29.44	10
20	43 19.65	16.40	—14.09	+46.97	+14.68	+ 7.36	30.97	10
22	43 21.80	14.18	—15.07	+46.87	+14.36	+ 7.37	29.51	10
Aug. 9	43 26.54	15.15	—14.05	+45.88	+10.99	+ 7.40	31.91	12
1820 Oct. 4	45 12.54	3.51	— 9.81	—33.71	— 4.04	+ 1.73	30.22	6
5	45 11.81	3.92	— 8.98	—33.76	— 4.14	+ 1.73	30.55	8

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
				η DRACONIS SUPRA POLUM				
1820 Febr. 13	4° 25′ 40″.00	11″.90	— 0″.21	+ 9″.17	+19″.43	+ 8″.51	14° 26′ 5″.00	8
14	39.75	12.11	0.00	+ 9.19	+19.51	+ 8.51	4.85	8
15	35.85	8.51	+ 0.04	+ 9.21	+19.59	+ 8.51	4.66	8
1821 Febr. 8	45.25	25.14	+ 0.44	+17.26	+18.90	+ 9.22	5.93	6
9	31.75	11.61	+ 0.34	+17.28	+19.04	+ 9.22	6.02	6
10	25.75	5.08	— 0.14	+17.30	+19.10	+ 9.22	6.15	6
11	25.42	5.37	— 0.17	+17.32	+19.15	+ 9.22	5.57	6
12	25.17	5.63	— 0.10	+17.34	+19.35	+ 9.22	5.35	6
13	24.67	4.52	0.00	+17.36	+19.37	+ 9.22	6.10	6
14	22.88	3.90	— 0.12	+17.38	+19.55	+ 9.22	5.01	6
15	22.25	3.98	— 0.02	+17.40	+19.63	+ 9.22	4.50	6
16	22.83	4.57	— 0.17	+17.42	+19.71	+ 9.22	4.44	6
17	19.38	1.88	— 0.15	+17.45	+19.79	+ 9.22	3.81	4
18	22.51	3.20	— 0.36	+17.47	+19.83	+ 9.22	5.46	6
				η DRACONIS INFRA POLUM				
1820 Jan. 13	70 32 41.16	3.97	+ 5.46	— 8.47	—13.87	— 8.38	70 32 19.87	8
14	32 46.67	2.58	+ 3.09	— 8.49	—14.11	— 8.40	21.34	6
24	32 56.19	3.56	— 2.52	— 8.72	—16.47	— 8.44	23.60	8
25	32 49.75	4.62	+ 0.23	— 8.74	—16.56	— 8.44	20.86	6
1821 Jan. 23	33 6.50	2.20	— 1.72	—16.92	—16.37	— 9.20	24.57	6
24	33 4.58	1.56	— 0.26	—16.94	—16.36	— 9.20	23.38	6
26	33 7.17	1.52	— 2.94	—16.98	—17.04	— 9.20	22.53	6
27	33 8.00	1.41	— 2.65	—17.00	—17.14	— 9.20	23.42	6
28	33 9.05	1.20	— 3.03	—17.02	—17.33	— 9.20	23.70	6
29	33 7.12	1.26	— 2.34	—17.04	—17.53	— 9.20	22.26	6
Febr. 7	32 56.54	6.32	+ 2.37	—17.25	—18.83	— 9.21	19.93	6
8	33 0.50	4.00	+ 2.05	—17.27	—18.97	— 9.22	21.01	6
9	33 5.96	1.43	— 1.37	—17.29	—19.01	— 9.22	20.86	6
11	33 11.58	1.55	— 4.11	—17.33	—19.25	— 9.22	23.22	6
12	33 8.92	1.29	— 2.43	—17.35	—19.39	— 9.22	21.82	6
13	33 10.08	1.04	— 2.59	—17.37	—19.51	— 9.22	22.43	6
14	33 12.71	0.92	— 4.00	—17.39	—19.59	— 9.22	23.43	6

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
η DRACONIS INFRA POLUM								
1821 Febr. 15	70° 33′ 10.″21	6.″91	— 2.″49	—17.″41	—19.″67	— 9.″22	70° 32′ 22.″33	6
16	33 10.83	1.21	— 2.63	—17.43	—19.75	— 9.22	23.01	6
γ DRACONIS INFRA POLUM								
1820 Jan. 14	80 53 56.96	4.20	+ 8.44	— 0.77	— 8.10	— 9.53	80 53 51.20	6
24	54 15.97	5.42	— 5.52	— 0.79	—11.05	— 9.55	54.48	8
25	54 10.50	3.85	+ 0.75	— 0.79	—11.33	— 9.55	53.43	8
1821 Jan. 24	54 12.25	2.62	— 0.51	— 1.53	—11.33	— 9.30	52.20	6
Febr. 8	54 3.04	9.10	+ 4.40	— 1.56	—15.08	— 9.34	50.56	6
9	54 17.58	2.84	— 3.19	— 1.56	—15.31	— 9.34	51.42	6
11	54 23.58	2.31	— 7.20	— 1.57	—15.69	— 9.33	52.10	6
12	54 21.25	1.99	— 5.26	— 1.57	—15.97	— 9.33	51.11	6
13	54 23.17	2.61	— 5.21	— 1.57	—16.16	— 9.33	53.51	6
14	54 24.46	2.58	— 7.17	— 1.58	—16.37	— 9.33	52.59	6
15	54 21.92	1.67	— 4.22	— 1.58	—16.53	— 9.33	51.93	6
V CAMELOPARDI INFRA POLUM								
1816 Sept. 20	52 32 22.37	1.28	— 5.44	+18.51	—14.74	+ 5.70	52 32 27.68	4
Oct. 17	22.12	3.21	— 3.49	+17.94	—17.27	+ 6.05	28.56	6
η BOOTIS								
1818 Maji 27	28 10 6.06	11.16	— 2.31	+11.02	+ 1.14	+ 0.47	28 10 5.22	4
Jun. 2	10 2.88	6.72	— 2.72	+10.72	+ 2.28	+ 0.42	6.86	4
4	9 57.25	3.31	— 2.62	+10.62	+ 2.68	+ 0.42	5.04	4
10	9 57.06	4.52	— 2.17	+10.32	+ 3.89	+ 0.41	4.99	4
τ BOOTIS								
1818 Maji 27	29 6 43.19	5.42	— 2.40	+10.88	+ 0.91	+ 0.72	29 6 47.88	4
Jun. 2	45.81	6.97	— 2.82	+10.59	+ 2.08	+ 0.70	49.39	4

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
ϑ CENTAURI								
1818 Maji 18	82° 50′ 50″.94	12″.69	—38″.36	+11″.07	— 9″.31	+ 0″.17	82° 50′ 1″.71	4
19	45.25	3.47	—40.64	+11.02	— 9.39	+ 0.17	50 2.94	4
27	36.13	4.69	—34.01	+10.63	— 9.83	+ 0.03	49 58.26	4
Jun. 2	56.38	16.52	—40.18	+10.34	—10.13	+ 0.03	49 59.92	4
4	40.38	2.21	—38.80	+10.24	—10.18	+ 0.03	49 59.46	4
10	34.81	2.69	—31.88	+ 9.95	—10.33	+ 0.03	49 59.83	4
14	55.81	8.66	—44.45	+ 9.76	—10.35	+ 0.11	50 2.00	4
ARCTURUS								
1818 Maji 19	27 20 54.81	10.33	— 2.67	+11.82	— 0.79	— 0.26	27 20 52.58	4
27	49.31	6.75	— 2.22	+11.41	+ 0.73	— 0.40	52.08	4
Jun. 2	54.38	10.64	— 2.63	+11.09	+ 2.02	— 0.40	53.80	4
4	42.88	3.07	— 2.54	+10.99	+ 2.44	— 0.40	50.30	4
10	45.06	4.57	— 2.10	+10.68	+ 3.71	— 0.40	52.38	4
14	43.63	4.14	— 2.96	+10.47	+ 4.51	— 0.54	50.97	4
ζ BOOTIS								
1818 Jun. 4	32 57 51.63	5.72	— 3.18	+ 9.11	+ 0.68	— 1.39	32 57 51.13	4
10	46.12	3.87	— 2.63	+ 8.86	+ 1.87	— 1.42	48.93	4
14	48.63	4.82	— 3.71	+ 8.69	+ 2.64	— 1.46	49.97	4
α 2 LIBRAE								
1818 Jun. 4	62 44 17.75	2.47	— 9.53	+ 8.91	— 5.23	— 1.71	62 44 8.72	4
10	19.88	4.03	— 7.88	+ 8.66	— 4.87	— 1.74	10.02	4
14	20.06	2.05	—11.12	+ 8.50	— 4.78	— 1.77	8.84	4
γ SCORPII								
1818 Jun. 14	72 0 12.81	3.23	—17.63	+ 8.01	— 6.33	— 0.09	71 59 53.54	4
17	8.50	3.09	—15.18	+ 7.89	— 6.27	— 0.10	51.75	4

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
			η CORONAE BOR.					
1818 Jun. 17	16°31′ 59.″81	6.″70	— 1.″47	+ 7.″13	+ 5.″75	— 3.″08	16°32′ 1.″44	4
20	58.50	4.67	— 1.77	+ 7.02	+ 6.47	— 2.98	2.57	2
			β CORONAE BOR.					
1818 Jun. 18	17 44 41.06	7.06	— 1.65	+ 6.88	+ 5.57	— 3.27	17 44 41.53	4
20	53.50	19.02	— 2.69	+ 6.81	+ 6.08	— 3.29	41.45	4
			GEMMA					
1818 Jun. 17	20 8 57.25	5.09	— 1.81	+ 6.80	+ 4.62	— 3.48	20 8 58.29	4
18	8 54.62	3.38	— 1.90	+ 6.78	+ 4.87	— 3.48	57.51	4
20	9 6.94	13.73	— 2.17	+ 6.70	+ 5.32	— 3.51	59.55	4
			α SERPENTIS					
1818 Jun. 17	40 28 13.00	4.39	— 4.23	+ 6.40	+ 0.70	— 3.76	40 28 7.72	4
18	11.69	2.06	— 4.43	+ 6.37	+ 0.87	— 3.78	8.66	4
20	12.38	2.99	— 5.10	+ 6.33	+ 1.20	— 3.80	8.02	4
			π SCORPII					
1818 Jun. 18	73 1 13.63	2.59	—16.96	— 4.73	— 4.73	— 4.13	73 0 40.49	4
20	21.69	4.91	—19.50	— 4.70	— 4.72	— 4.13	43.73	4
			ε OPHIUCHI					
1818 Jun. 7	51 42 37.68	4.83	— 5.97	+ 5.33	— 2.31	— 4.83	51 42 25.17	4
17	38.38	4.49	— 6.25	+ 5.07	— 1.22	— 4.90	26.59	4
20	35.50	2.26	— 7.54	+ 4.99	— 0.89	— 4.92	24.88	4

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
γ HERCULIS								
1818 Jun. 17	27° 53′ 46.″69	13.″73	— 2.″61	+ 4.″86	+ 1.″99	— 5.″07	27° 53′ 32.″13	4
18	33.50	2.20	— 2.75	+ 4.84	+ 2.24	— 5.08	30.55	4
20	37.38	6.02	— 3.16	+ 4.79	+ 2.65	— 5.11	30.53	4
ANTARES								
1818 Jun. 7	73 27 21.06	2.38	—15.86	+ 4.98	— 3.65	— 4.99	73 26 59.16	4
18	24.00	2.79	—17.41	+ 4.71	— 3.77	— 5.12	26 59.62	4
20	48.12	22.12	—20.05	+ 4.67	— 3.78	— 5.12	27 1.72	4
β HERCULIS								
1818 Jun. 4	25 35 25.00	9.29	— 2.35	+ 4.82	— 1.05	— 5.25	25 35 11.88	4
17	20.12	7.76	— 2.36	+ 4.52	+ 2.04	— 5.35	11.21	4
29	21.75	9.22	— 2.84	+ 4.25	+ 4.75	— 5.43	13.16	4
ζ OPHIUCHI								
1818 Jun. 7	57 39 17.06	2.61	— 7.44	+ 4.46	— 2.55	— 5.41	57 39 3.51	4
18	15.12	2.07	— 8.17	+ 4.22	— 1.69	— 5.51	1.90	4
ζ HERCULIS								
1818 Jun. 4	15 32 58.56	15.25	— 1.38	+ 3.96	— 0.93	— 5.60	15 32 39.36	4
5	54.56	10.25	— 1.38	+ 3.95	— 0.64	— 5.60	40.64	4
18	48.88	9.35	— 1.44	+ 3.70	+ 2.92	— 5.71	39.00	4
20	54.50	12.76	— 1.66	+ 3.66	+ 3.45	— 5.71	41.48	4
29	44.62	5.28	— 1.45	+ 3.50	+ 5.75	— 5.78	41.36	4

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
ε HERCULIS								
1818 Jun. 7	16° 17′ 13″.81	15″.12	— 1″.37	+ 3″.26	+ 0″.99	— 6″.41	16° 16′ 53″.18	4
18	17 7.88	11.00	— 1.51	+ 3.09	+ 2.00	— 6.46	54.00	4
27	16 53.88	0.74	— 1.36	+ 2.94	+ 4.37	— 6.50	52.59	2
29	16 57.62	4.52	— 1.53	+ 2.91	+ 4.93	— 6.50	52.91	4
Jul. 1	16 59.75	5.02	— 1.46	+ 2.88	+ 5.48	— 6.53	55.10	4
5	17 9.50	14.96	— 1.36	+ 2.82	+ 6.45	— 6.53	55.92	4
β OPHIUCHI								
1818 Jun. 18	42 49 22.00	4.06	— 4.80	+ 1.09	— 0.40	— 7.25	42 49 5.49	4
26	19.81	2.92	— 5.22	+ 1.05	+ 0.84	— 7.30	5.21	4
27	18.38	3.27	— 4.33	+ 1.04	+ 1.01	— 7.30	4.49	4
29	17.44	2.19	— 4.86	+ 1.03	+ 1.34	— 7.31	4.42	4
Jul. 1	14.88	2.15	— 4.65	+ 1.02	+ 1.67	— 7.32	2.43	4
5	14.94	2.67	— 4.32	+ 1.00	+ 2.26	— 7.34	2.87	4
8	17.88	2.66	— 4.81	+ 0.98	+ 2.71	— 7.38	5.74	4
η OPHIUCHI								
1818 Jun. 5	62 56 57.94	4.11	— 9.02	+ 2.99	— 2.17	— 6.33	62 56 39.30	4
26	55.00	1.67	—11.01	+ 2.65	— 1.19	— 6.47	37.31	4
29	54.38	1.82	—10.26	+ 2.61	— 1.02	— 6.50	37.39	4
Jul. 1	54.00	2.38	— 9.82	+ 2.58	— 0.92	— 6.52	36.94	4
ϑ OPHIUCHI								
1818 Jun. 27	72 14 49.94	2.11	—14.56	+ 2.24	— 1.83	— 6.77	72 14 26.91	4
Jul. 1	52.25	2.74	—15.64	+ 2.20	— 1.83	— 6.79	27.45	4
5	51.88	1.33	—14.51	+ 2.15	— 1.84	— 6.81	29.54	4
8	54.12	1.64	—15.83	+ 2.11	— 1.85	— 6.84	30.07	4

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
λ SCORPII								
1818 Jun. 27	84° 18′ 23″.44	2″.67	−47″.44	+ 1″.76	− 2″.45	− 6″.88	84° 17′ 25″.76	4
Jul. 5	28.62	5.56	−47.17	+ 1.68	− 2.96	− 6.97	27.64	4
8	28.69	1.51	−51.43	+ 1.66	− 3.16	− 6.97	27.28	4
α OPHIUCHI								
1818 Jun. 18	34 46 37.62	3.66	− 3.59	+ 1.68	+ 0.08	− 7.07	34 46 24.90	4
26	35.81	2.85	− 3.90	+ 1.61	+ 1.47	− 7.12	25.02	4
27	37.00	4.89	− 3.24	+ 1.61	+ 1.68	− 7.12	25.04	4
29	51.31	17.42	− 3.63	+ 1.59	+ 2.08	− 7.14	26.80	4
Jul. 1	39.50	6.44	− 3.47	+ 1.57	+ 2.60	− 7.15	26.61	4
5	33.38	1.99	− 3.23	+ 1.54	+ 3.24	− 7.17	25.77	4
8	34.62	3.05	− 3.52	+ 1.51	+ 3.79	− 7.19	26.16	4
γ OPHIUCHI								
1818 Jun. 26	44 41 32.88	17.22	− 5.55	+ 1.00	+ 0.74	− 7.42	44 41 4.43	4
27	18.75	4.65	− 4.62	+ 1.00	+ 0.89	− 7.42	3.95	4
29	26.06	10.10	− 5.17	+ 0.99	+ 1.19	− 7.43	5.54	4
Jul. 1	17.62	2.92	− 4.95	+ 0.98	+ 1.79	− 7.44	5.08	4
5	13.19	1.43	− 4.60	+ 0.97	+ 2.09	− 7.45	2.77	4
8	14.75	2.11	− 5.02	+ 0.96	+ 2.54	− 7.47	3.65	4
ζ SERPENTIS								
1818 Jun. 27	51 8 15.00	2.49	− 5.80	+ 0.45	+ 0.55	− 7.66	51 8 0.05	4
29	13.81	3.19	− 6.51	+ 0.44	+ 0.78	− 7.67	7 57.66	4
Jul. 1	15.00	2.23	− 6.23	+ 0.44	+ 1.00	− 7.68	8 0.30	4
3	14.75	2.36	− 6.94	+ 0.44	+ 1.23	− 7.69	7 59.43	4
8	14.44	2.69	− 6.32	+ 0.43	+ 1.79	− 7.72	7 59.93	4

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
μ 1 SAGITTARII								
1818 Jun. 26	68°32′ 41″.50	2″.24	—14″.29	— 0″.08	+ 0″.11	— 7″.76	68°32′ 17″.24	4
27	36.00	1.66	—11.87	— 0.08	+ 0.12	— 7.77	14.74	4
28	41.75	1.83	—15.56	— 0.08	+ 0.13	— 7.78	16.63	4
29	39.50	0.45	—12.57	— 0.07	+ 0.15	— 7.79	18.77	2
Jul. 1	44.25	5.32	—12.74	— 0.07	+ 0.20	— 7.79	18.53	4
3	40.25	2.99	—14.18	— 0.07	+ 0.24	— 7.80	15.45	2
8	46.50	7.03	—12.92	— 0.07	+ 0.26	— 7.84	18.90	4
μ 2 SAGITTARII								
1818 Jun. 29	68 13 22.00	5.46	—13.09	— 0.15	+ 0.21	— 7.80	68 12 55.71	2
Jul. 5	15.12	1.72	—11.62	— 0.15	+ 0.29	— 8.82	53.10	4
η SERPENTIS								
1818 Jun. 26	50 24 22.38	2.42	— 6.79	— 0.18	+ 0.56	— 8.03	50 24 5.52	4
27	20.62	2.05	— 5.64	— 0.18	+ 0.68	— 8.03	5.40	4
28	25.56	4.62	— 7.21	— 0.18	+ 0.80	— 8.04	6.31	4
Jul. 1	22.00	2.81	— 6.06	— 0.18	+ 1.17	— 8.06	6.06	4
3	22.62	2.61	— 6.74	— 0.17	+ 1.41	— 8.07	6.44	4
ε SAGITTARII								
1818 Jun. 29	81 50 37.00	0.39	—33.28	— 0.48	+ 0.08	— 7.93	81 49 55.00	2
Jul. 5	38.38	1.78	—32.18	— 0.46	— 0.12	— 7.96	55.88	4
λ SAGITTARII								
1818 Jun. 26	72 57 1.12	7.03	—18.31	— 0.62	+ 0.53	— 8.00	72 56 27.70	4
27	56 55.38	2.86	—15.22	— 0.61	+ 0.53	— 8.01	29.20	4

Distantiae a vertice Stellarum inerrantium.

Tempus Observationis	Dist. a vert. observata	Red. ad mer.	Temperies	Praecessio	Aberratio	Nutatio	Dist. a vert. ad init. 1819.	Num. Obser.
λ SAGITTARII								
1818 Jun. 29	72° 56′ 51.″25	0.″50	—15.″31	— 0.″60	+ 0.″52	— 8.″02	72° 56′ 27.″34	2
Jul. 1	56 56.50	1.68	—16.34	— 0.60	+ 0.47	— 8.04	30.31	4
3	56 57.75	4.19	—18.18	— 0.60	+ 0.45	— 8.06	27.17	2
5	56 54.50	1.59	—15.17	— 0.59	+ 0.42	— 8.06	29.51	4
8	57 0.50	4.84	—16.55	— 0.58	+ 0.39	— 8.07	30.85	4
ε CYGNI								
1816 Sept. 10	14 12 38.10	67.54	— 1.12	—30.65	+12.75	— 6.84	14 11 4.70	6
11	14.81	46.07	— 1.17	—30.61	+12.92	— 6.84	3.04	4
14	22.36	113.25	— 0.98	—30.50	+13.44	— 6.85	4.22	8
16	36.00	67.38	— 1.12	—30.42	+13.78	— 6.86	4.00	6
17	40.82	71.92	— 1.16	—30.38	+13.96	— 6.87	4.45	10

OBSERVATIONES
DISTANTIARUM A VERTICE
SOLIS, ET PLANETARUM.

Distantiae a vertice Planetarum.

Tempus Observationis	Dist. a vert. observata	Reduc. merid.	Temperies	Refrac. med.	Parallaxis	Declinatio observata	Tabulae Delamb.	Num. Obser.
			CENTRI SOLIS					
1816 Aug. 30	38° 13′ 0.″12	—11.″64	— 4.″70	47.″73	— 5.″37	8° 59′ 54.″00	— 3.″02	4
Sept. 11	42 56 9.10	—30.02	— 4.84	56.50	— 5.96	4 32 48.42	— 4.22	6
12	43 19 13.54	—38.26	— 5.38	57.06	— 5.99	4 9 52.03	— 1.64	8
14	44 5 4.19	—31.70	— 4.72	58.60	— 6.09	3 23 52.72	— 4.19	8
17	45 14 38.21	—33.66	— 5.37	61.02	— 6.21	2 14 18.91	— 1.45	10
18	45 37 56.87	—36.70	— 5.76	61.85	— 6.27	1 51 3.01	— 2.00	12
19	46 1 5.11	—27.50	— 6.35	62.69	— 6.31	1 27 45.36	— 4.67	8
27	49 7 47.88	— 1.18	— 4.35	69.91	— 6.66	1 39 32.60	+ 5.31	2
28	49 31 29.74	—16.18	— 4.76	70.84	— 6.70	2 2 59.96	+ 3.16	8
Oct. 3	51 27 59.68	— 5.55	— 7.32	75.92	— 6.84	3 59 42.89	+ 1.76	2
5	52 14 33.69	—23.00	— 5.52	78.09	— 6.94	4 46 3.32	+ 3.89	8
1818 Maji 7	30 46 7.62	— 6.20	— 3.52	36.04	— 4.49	16 42 43.55	— 4.″23	4
9	30 13 23.75	— 9.35	— 3.88	35.29	— 4.36	17 15 31.55	— 3.75	4
18	28 0 54.69	—27.54	— 2.85	32.25	— 4.08	19 18 20.53	— 2.73	8
19	27 47 25.25	— 2.91	— 3.28	31.94	— 4.04	19 41 26.04	— 1.42	2
23	26 58 9.63	— 5.05	— 2.37	30.84	— 3.90	20 30 43.85	— 3.14	4
27	26 14 26.50	— 3.93	— 2.60	29.88	— 3.88	21 14 27.03	— 5.00	4
Jun. 7	24 45 6.88	— 4.63	— 2.79	27.94	— 3.62	22 43 49.22	— 1.95	2
8	24 39 15.50	— 3.20	— 2.64	27.82	— 3.61	22 49 39.13	— 4.57	4
10	24 28 57.75	— 7.66	— 2.36	27.59	— 3.59	23 0 1.27	— 4.15	6
12	24 20 12.38	— 5.88	— 2.57	27.41	— 3.55	23 8 45.21	— 2.88	4
13	24 16 23.12	— 3.26	— 2.63	27.33	— 3.54	23 12 31.98	— 3.84	4
14	24 13 2.19	— 4.12	— 3.05	27.26	— 3.53	23 15 54.25	— 4.53	4
15	24 10 7.38	— 3.69	— 2.96	27.20	— 3.53	23 18 48.60	— 2.08	4
16	24 7 34.68	— 3.78	— 2.63	27.15	— 3.53	23 21 21.11	— 2.41	4
17	24 5 26.50	— 4.65	— 2.72	27.10	— 3.53	23 23 30.30	— 4.10	4
18	24 3 48.31	— 4.88	— 3.07	27.07	— 3.53	23 25 9.10	— 0.14	4
20	24 1 33.75	— 3.00	— 3.07	27.02	— 3.53	23 27 21.83	— 1.46	4
21	24 1 4.12	— 3.04	— 3.23	27.01	— 3.52	23 27 51.66	— 2.71	4
22	24 1 0.18	— 3.36	— 3.55	27.01	— 3.52	23 27 56.24	— 3.46	4
24	24 2 6.94	— 2.50	— 2.88	27.03	— 3.52	23 26 47.93	— 1.77	4
26	24 4 59.50	— 9.71	— 2.91	27.09	— 3.52	23 24 2.55	— 2.20	2
27	24 6 51.12	— 2.59	— 2.60	27.13	— 3.53	23 22 3.47	— 2.75	4

Distantiae a vertice Planetarum.

Tempus Observationis	Dist. a vert. observata	Reduc. merid.	Temperies	Refrac. med.	Paralaxis	Declinatio observata	Tabulae Delamb.	Num. Obser.
			CENTRI SOLIS					
1818 Jun. 28	24° 9′ 16.″88	— 4.″55	— 3.″05	27.″18	— 3.″53	23° 19′ 40.″07	— 3.″89	4
Julii 1	24 18 57.38	— 2.06	— 2.94	27.39	— 3.54	23 9 56.77	— 1.41	4
3	24 27 28.62	— 3.02	— 3.22	27.57	— 3.58	23 1 26.63	— 0.46	4
4	24 32 19.25	— 2.60	— 2.94	27.67	— 3.59	22 56 35.21	— 0.00	4
7	24 49 12.50	— 1.78	— 2.82	28.03	— 3.63	22 39 40.60	— 1.79	4
9	25 2 31.19	— 4.41	— 2.95	28.32	— 3.66	22 26 24.51	— 1.56	4
11	25 17 17.00	— 0.55	— 2.79	28.63	— 3.69	22 11 34.40	— 0.36	2
13	25 33 37.31	— 2.00	— 3.45	28.77	— 3.72	21 55 16.09	— 3.70	4
15	25 51 26.12	— 1.90	— 2.90	29.37	— 3.77	21 37 26.08	— 2.59	4
20	26 42 23.50	— 1.62	— 3.52	30.49	— 3.88	20 46 28.03	— 2.72	4
25	27 42 5.00	— 1.90	— 3.86	31.82	— 4.03	19 46 45.97	— 3.56	4
27	28 8 22.62	— 2.05	— 4.00	32.42	— 4.09	19 20 28.10	— 0.00	4
29	28 36 0.50	—10.47	— 3.89	33.05	— 4.15	18 52 57.96	— 0.41	8
31	29 4 37.06	— 2.08	— 4.18	33.71	— 4.21	18 24 12.70	— 1.21	4
Aug. 1	29 19 27.63	— 1.74	— 4.17	34.05	— 4.24	18 9 21.47	— 0.45	4
Dec. 21	70 54 26.56	—17.15	— 4.35	173.40	— 8.41	23 27 37.05	+ 5.78	4
23	70 54 22.31	—15.78	— 2.46	173.25	— 8.41	23 27 35.91	+ 3.22	4
24	70 53 34.38	—15.67	— 0.05	173.22	— 8.41	23 26 50.47	+ 4.27	4
1819 Mart. 9	52 11 19.56	— 2.46	— 3.85	77.92	— 6.96	4 43 11.21	+ 4.61	4
11	51 24 46.18	—19.69	— 5.35	75.77	— 6.87	3 56 18.04	+ 2.66	4
12	51 1 15.38	—20.00	— 4.76	74.72	— 6.86	3 32 45.48	+ 3.22	4
13	50 37 40.69	—19.39	— 3.58	73.69	— 6.83	3 9 11.58	+ 2.79	2
19	48 15 54.00	—26.11	— 3.43	67.80	— 6.56	0 47 12.70	+ 1.81	4
22	47 4 56.88	—32.24	— 3.85	65.05	— 6.45	0 23 53.61	— 1.77	4
23	46 41 1.75	—20.22	— 3.75	64.15	— 6.41	0 47 37.48	— 5.35	4
26	45 30 16.75	—21.29	— 4.55	61.58	— 6.27	1 58 26.78	— 4.75	2
27	45 6 41.18	—19.28	— 3.65	60.73	— 6.21	2 22 0.23	— 5.74	4
28	44 43 20.88	—27.18	— 4.05	59.91	— 6.19	2 45 29.63	— 5.77	4
30	43 56 31.34	—22.51	— 4.61	58.85	— 6.11	3 32 16.04	— 4.03	4
31	43 33 8.39	—18.20	— 4.08	56.98	— 6.00	3 55 35.91	— 5.88	4
1820 Mart. 14	49 55 58.69	— 7.88	— 3.32	71.95	— 6.76	2 27 39.68	+ 2.82	8
17	48 44 53.17	— 9.09	— 3.08	69.03	— 6.64	1 16 30.39	+ 2.62	6
20	47 33 52.00	— 8.09	— 2.90	66.36	— 6.55	0 5 27.82	+ 1.55	4

Distantiae a vertice Planetarum.

Tempus Observationis	Dist. a vert. observata	Reduc. merid.	Temperies	Refrac. med.	Parallaxis	Declinatio observata	Tabulae Delamb.	Num. Obser.
CENTRI SOLIS								
1820 Mart. 21	47° 10′ 7″.81	— 4″.47	— 3″.01	65″.30	— 6″.46	0° 18′ 13″.83	— 2″.05	8
Sept. 10	42 33 54.67	— 5.92	— 4.74	55.62	— 5.86	4 54 39.23	— 2.37	6
13	43 42 39.25	— 7.62	— 5.04	57.90	— 5.86	3 45 54.37	— 2.93	2
14	44 5 41.62	— 5.65	— 4.93	58.67	— 6.08	3 22 49.37	— 0.84	4
16	44 51 52.75	— 4.13	— 4.90	60.22	— 6.18	2 36 35.24	— 4.58	6
17	45 15 6.25	— 3.82	— 5.36	61.04	— 6.21	2 13 21.10	— 3.80	6
18	45 38 22.07	— 4.73	— 5.51	61.85	— 6.26	1 50 5.58	— 3.97	6
19	46 1 40.46	— 4.83	— 5.92	62.50	— 6.31	1 26 47.10	— 3.58	6
20	46 24 69.62	— 4.05	— 5.83	63.56	— 6.34	1 3 26.04	— 2.73	6

Distantiae a vertice Planetarum.

Tempus Observationis	Dist. a vert. observata	Reduc. merid.	Temperies	Distantia meridiana	Declinatio apparens		Num. Observation.
CENTRI MERCURII							
1818 Junii 21	28° 49′ 45.″75	— 1.″35	— 4.″13	28° 49′ 40.″27	18° 39′ 32.″73	B.	2
27	26 37 59.75	—12.15	— 2.85	26 37 44.75	20 51 28.25	B.	2
28	26 16 12.63	— 1.35	— 3.25	26 16 8.03	21 13 4.97	B.	2
Julii 1	25 15 37.50	— 6.02	— 2.97	25 15 28.51	22 13 44.49	B.	2
3	24 40 34.12	— 4.64	— 3.21	24 40 26.27	22 48 46.73	B.	2
4	24 25 22.75	—10.36	— 2.87	24 25 9.52	23 4 3.48	B.	2
7	23 50 55.62	— 4.05	— 2.71	23 50 48.86	23 38 24.14	B.	2
29	30 38 47.25	— 1.25	— 4.39	30 38 41.61	16 50 31.39	B.	2
Aug. 1	32 35 54.75	— 1.11	— 4.82	32 35 48.82	14 53 24.18	B.	2
CENTRI VENERIS							
1818 Maji 9	26 29 12.6	— 5.5	— 3.4	26 29 3.7	21 0 9.3	B.	4
10	26 12 43.7	— 5.2	— 2.9	26 12 35.6	21 16 37.4	B.	4
18	24 23 2.7	—11.5	— 2.7	24 22 48.5	23 6 24.5	B.	4
22	23 43 39.3	— 6.2	— 2.6	23 43 30.5	23 45 42.5	B.	2
23	23 35 43.6	—18.4	— 2.1	23 35 23.1	23 53 49.9	B.	6
27	23 9 58.8	— 2.9	— 2.3	23 9 53.6	24 19 19.4	B.	2
Junii 7	22 58 48.6	— 3.1	— 2.5	22 58 43.0	24 30 30.0	B.	2
8	23 2 3.8	— 3.9	— 2.6	23 1 57.3	24 27 15.7	B.	4
12	23 22 22.6	— 4.1	— 2.6	23 22 15.9	24 6 57.1	B.	4
14	23 36 47.9	— 2.4	— 2.9	23 36 42.6	23 52 30.4	B.	2
16	23 53 59.9	— 4.1	— 2.7	23 53 53.1	23 35 19.9	B.	4
17	24 3 32.8	— 4.6	— 2.9	24 3 25.3	23 25 47.7	B.	2
18	24 13 51.4	— 1.9	— 3.0	24 13 46.5	23 16 26.5	B.	2
20	24 36 34.9	— 9.9	— 3.2	24 36 21.8	22 52 51.2	B.	2
21	24 48 39.3	— 9.6	— 4.0	24 48 25.1	22 40 47.9	B.	2
22	25 1 25.9	— 1.3	— 3.7	25 1 20.9	22 27 52.1	B.	2
24	25 29 8.5	— 2.9	— 3.2	25 29 2.4	22 0 10.6	B.	4
27	26 15 10.8	— 3.9	— 3.0	26 15 3.9	21 14 9.1	B.	4
28	26 31 43.0	— 3.8	— 3.5	26 31 35.7	20 57 37.3	B.	4

Distantiae a vertice Planetarum.

Tempus Observationis	Dist. a vert. observata	Reduc. merid.	Temperies	Distantia meridiana	Declinatio apparens		Num. Observation.
CENTRI VENERIS							
1818 Julii 1	27° 24′ 27.″8	— 2.″8	— 3.″4	27° 24′ 21.″6	20° 4′ 51.″4	B.	4
3	28 2 45.3	— 2.6	— 3.7	28 2 39.0	19 26 34.0	B.	4
4	28 22 36.3	— 2.7	— 3.6	28 22 30.0	19 6 43.0	B.	4
6	29 3 43.8	— 3.6	— 3.1	29 3 37.1	18 25 35.9	B.	4
9	30 8 57.3	— 2.0	— 3.9	30 8 51.4	17 20 21.6	B.	4
13	31 42 22.5	— 7.3	— 4.5	31 42 10.7	15 47 2.3	B.	2
15	32 29 46.8	— 1.5	— 4.0	32 29 41.3	14 59 31.7	B.	4
25	36 57 17.4	— 2.7	— 5.9	36 57 8.8	10 32 4.2	B.	4
27	37 53 52.3	— 2.3	— 5.7	37 53 44.3	9 35 28.7	B.	4
29	38 51 29.6	— 2.4	— 6.2	38 51 21.0	8 37 52.0	B.	4
31	39 49 51.3	— 1.9	— 6.1	39 49 43.3	7 39 29.7	B.	2
Aug. 1	40 19 22.4	— 1.5	— 6.7	40 19 14.2	7 9 58.8	B.	4
CENTRI MARTIS							
1818 Maji 22	25 55 57.3	— 5.7	— 2.6	25 55 49.0	21 33 24.0	B.	2
23	26 3 57.1	— 3.7	— 2.4	26 3 51.0	21 25 22.0	B.	2
CENTRI JOVIS							
1818 Jun. 27	70 36 35.4	— 3.5	—16.0	70 36 15.9	23 7 2.9	A.	4
28	70 37 14.5	— 4.3	—13.3	70 36 56.9	23 7 43.9	A.	6
29	70 37 54.5	— 2.5	—17.0	70 37 35.0	23 8 22.0	A.	4
30	70 38 25.7	— 3.6	—14.1	70 38 8.0	23 8 55.0	A.	6
Julii 1	70 39 43.3	— 1.9	—14.3	70 39 27.1	23 10 14.1	A.	4
3	70 40 49.9	— 1.8	—15.9	70 40 32.2	23 11 19.2	A.	4
5	70 41 59.5	— 3.0	—13.3	70 41 43.2	23 12 30.2	A.	4
8	70 43 39.3	— 1.4	—14.8	70 43 23.1	23 14 10.1	A.	4
1820 Oct. 1	54 32 14.6	— 6.8	— 6.6	54 32 1.2	7 2 48.2	A.	4

Distantiae a vertice Planetarum.

Tempus Observationis	Dist. a vert. observata	Reduc. merid.	Temperies	Distantia meridiana	Declinatio apparens		Num. Observation.
CENTRI JOVIS							
1820 Oct. 4	54°39′ 28.″9	— 4.″7	— 5.″1	54°39′ 19.″1	7° 10′ 6.″1	A.	4
5	54 43 3.3	—10.9	— 4.7	54 42 47.7	7 13 34.7	A.	4
CENTRI SATURNI							
1820 Oct. 2	45 55 1.0	— 1.6	— 4.8	45 54 54.6	1 34 18.4	B.	4
4	46 0 34.9	— 2.6	— 3.8	46 0 28.5	1 28 44.5	B.	4
5	46 2 25.8	— 3.1	— 3.5	46 2 19.2	1 26 53.8	B.	4
CENTRI URANI							
1818 Junii 5	70 28 8.2	— 9.8	—12.5	70 27 45.9	22 58 32.9	A.	4
9	70 27 16.6	— 4.6	—12.2	70 26 59.8	22 57 46.8	A.	4
13	70 26 18.4	— 3.2	—13.7	70 26 1.5	22 56 48.5	A.	4
17	70 25 24.8	— 2.5	—13.9	70 25 8.4	22 55 55.4	A.	4
18	70 24 16.5	— 2.3	—15.6	70 24 58.6	22 55 45.6	A.	4
27	70 23 21.2	— 2.1	—13.1	70 23 6.0	22 53 53.0	A.	4
Julii 1	70 22 52.3	— 1.6	—14.0	70 22 16.7	22 53 3.7	A.	4
5	70 21 49.1	— 3.3	—13.0	70 21 32.8	22 52 19.8	A.	4
8	70 21 14.3	— 2.7	—14.2	70 20 57.4	22 51 44.4	A.	4

Distantiae a vertice Planetarum.

Dies Observationis	Culminatio Limbi	Tempus Observationis	Dist. a vert. Limbi	Baromet.	Thermom.
		LUNAE			
1818 Maji 17	Occid. 13h 20′ 4″.3	13h 20′ 15″ 21 56 23 5 24 6	Super. 54° 55′ 40″.50	27P 3l.0	Ad Bar. + 11°.4 Circ. + 10.6 Ext. + 9.5
18	Occid. 14 15 56.6	14 14 29 15 37 16 56 18 15	Super. 61 37 59.00	27 4.0	Ad Bar. + 12.2 Circ. + 12.7 Ext. + 11.0
19	Occid. 15 16 20.2	15 15 40 17 6 18 5 19 26	Centr. 67 55 36.80	27 3.6	Ad Bar. + 12.7 Circ. + 13.1 Ext. + 11.5
Junii 11	Occid. 11 16 47.9	11 15 42 16 46 18 13 19 22	Super. 38 58 21.75	27 4.1	Ad Bar. + 13.0 Circ. + 15.3 Ext. + 16.5
13	Occid. 12 55 29.4	12 54 6 55 39 56 32 57 29	Super. 51 52 26.25	27 5.8	Ad Bar. + 14.0 Circ. + 15.7 Ext. + 13.7
14	Occid. 13 48 0.2	13 46 31.5 47 42.5 48 38.5 49 53.5 50 47.5 51 47.5	Super. 58 30 53.08	27 4.9	Ad Bar. + 15.0 Circ. + 16.4 Ext. + 15.4

Distantiae a vertice Planetarum.

Dies Observationis	Culminatio Limbi	Tempus Observationis	Dist. a vert. Limbi	Baromet.	Thermom.
		L U N A E			
1818 Junii 17	Occid. $16^h\ 53'\ 48''.4$	$16^h\ 53'\ 10''$ 54 24 55 37 56 56	Super. $74^o 30'\ 6''.44$	$27^p\ 4^l.6$	Ad Bar. + 14°o Circ. + 13. 6 Ext. + 11. 5
19	Orient. $18\ \ 7\ 31.3$	18 3 44 4 57 5 54 6 53	Infer. 76 17 10. 62	27 5. 3	Ad Bar. + 14. 3 Circ. + 13. 5 Ext. + 11. 8
24	Orient. $23\ \ 16\ 49.7$	23 14 55 15 59 16 49 17 46	Super. 56 58 53. 75	27 4. 9	Ad Bar. + 15. 7 Circ. + 14. o Ext. + 12. 5
Julii 15	Occid. $17\ \ 28\ 12.2$	17 27 0 28 9 30 20 31 58	Centr. 75 26 33. 50	27 4. 3	Ad Bar. + 16. o Circ. + 22. 5 Ext. + 19. 7

ADSCENSIONES RECTAE MEDIAE
147 STELLARUM INERRANTIUM
EX
OBSERVATIONIBUS IN TEMPORE DEPROMTAE
ET
AD INITIUM ANNI 1819. REDUCTAE.

ASCENSIONES RECTAE MEDIAE
STELLARUM INERRANTIUM
EX
OBSERVATIONIBUS IN TEMPORE DERIVATAE
ET
AD INITIUM ANNI 1863 REDUCTAE

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. rect. media ad init. 1819.	Tempus Observationis	Adscens. rect. media ad init. 1819.	Tempus Observationis	Adscens. rect. media ad init. 1819.
γ PEGASI		**γ PEGASI**		**ι CETE**	
1818 Aug. 18	$0^h\ 3'\ 55''.48$	1819 Jan. 22	$0^h\ 3'\ 55''.40$	1818 Oct. 9	$0^h\ 10'\ 12''.17$
30	55.21	23	55.42	10	12.04
31	55.43	28	55.50	11	12.17
Sept. 1	55.31	30	55.42	12	12.07
9	55.32	Febr. 2	55.43	16	11.90
10	55.35	Apr. 16	55.38	17	11.80
12	55.39	22	55.30	21	12.18
Oct. 15	55.34	Maii. 7	55.36	26	11.90
16	55.15	12	55.52	27	11.95
21	55.34	16	55.48	28	12.24
22	55.32	17	55.49	29	11.78
24	55.41	18	55.48	30	11.98
26	55.37	19	55.49	Nov. 8	12.08
27	55.29	20	55.39	11	12.13
28	55.38	21	55.31	13	12.25
29	55.37	23	55.43	14	11.87
30	55.35	24	55.40	23	12.17
Nov. 8	55.43	25	55.49	24	12.04
11	55.48	26	55.44	25	12.18
14	55.58	28	55.53	29	12.10
18	55.46	Jun. 3	55.53	Dec. 21	12.18
23	55.41	4	55.42	23	12.22
24	55.38	5	55.47	24	12.03
25	55.44	6	55.39	30	12.19
29	55.44	22	55.50	31	11.91
30	55.41	24	55.44	1819 Jan. 3	12.26
Dec. 21	55.34	25	55.58	4	12.12
23	55.48	26	55.40	13	12.06
24	55.32	27	55.49		
28	55.38	28	55.46		
30	55.42			**β CETE**	
1819 Jan. 3	55.49				
4	55.30			1818 Oct. 10	$0\ 34\ 29''.90$
13	55.52			25	29.93

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta med. ad init. 1819.
β CETE	
1818 Dec. 28	0^h 34′ 29.″81
1819 Jan. 3	29.92
4	29.92
5	29.97
23	29.81
30	29.68
Maii 7	29.77
11	29.67
18	29.67
19	29.77
20	29.81
22	29.95
23	29.74
24	29.77
26	29.73
Junii 3	29.80
4	29.73
5	29.76
6	29.89
15	29.68
22	29.60
24	29.79
25	29.82
26	29.85
27	29.64
28	29.78
ε PISCIUM	
1818 Oct. 25	0 53 33.12
Dec. 28	33.45
29	33.36
30	33.47

Tempus Observationis	Adscens. recta med. ad init. 1819.
ε PISCIUM	
1819 Jan. 1	0^h 53′ 33.″03
3	33.31
4	33.12
5	33.49
6	33.46
23	33.22
β ANDROMEDAE	
1818 Dec. 25	0 59 37.28
30	37.41
1819 Jan. 1	37.30
3	37.48
4	37.39
5	37.54
6	37.59
23	37.41
β ARIETIS	
1818 Oct. 22	1 44 39.32
1819 Jan. 6	39.69
α ARIETIS	
1819 Jan. 3	1 56 59.21
4	59.18
5	59.34
6	59.11
Febr. 1	59.27
2	59.17

Tempus Observationis	Adscens. recta media ad init. 1819.
α ARIETIS	
1819 Febr. 3	1^h 56 59.″18
6	59.20
9	59.06
Maii 24	59.21
26	59.34
Junii 1	59.29
3	59.20
4	59.17
5	59.21
6	59.22
13	59.40
15	59.20
16	59.06
22	59.31
24	59.33
26	59.38
27	59.15
41 ARIETIS	
1819 Jan. 22	2 39 20.98
23	21.05
Febr. 1	20.90
2	20.96
3	21.03
η ERIDANI	
1819 Jan. 13	2 47 35.39
23	35.07
28	35.04
Febr. 1	35.17

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

α CETE

Tempus Observationis	Adscens. recta media ad init. 1819.
1818 Aug. 8	2h 52′ 49.″57
16	49.35
1819 Jan. 3	49.41
4	49.52
6	49.50
13	49.49
22	49.51
23	49.70
30	49.72
Febr. 1	49.39
9	49.49
12	49.48
Maii 28	49.40
Junii 1	49.47
4	49.71
29	49.61

ALGOL

1819 Jan. 3	2	56	25.56
4			25.40
6			25.63
13			25.65
22			25.57
23			25.73
28			25.78
30			25.77
Febr. 1			25.52
3			25.66
9			25.67
12			25.63

δ ARIETIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1819 Jan. 4	3h 1′ 17.″78
13	17.65
28	17.69
30	17.68
Febr. 1	17.63
2	17.44
3	17.60
9	17.59
12	17.62

ζ ERIDANI

1819 Jan. 3	3	7	2.98
4			2.74
6			3.04
28			2.80
30			2.85
Febr. 9			2.75

α PERSEI

1818 Dec. 29	3	11	27.18
1819 Jan. 3			26.89
4			26.96
13			27.24
28			27.05
30			27.10
31			26.97
Febr. 1			26.82
9			26.84
12			26.93

ξ TAURI

Tempus Observationis	Adscens. recta media ad init. 1819.
1818 Dec. 29	3h 17′ 22.″20
1819 Jan. 3	22.26
4	21.98
6	22.28
13	21.98
28	21.99
30	22.21
31	22.15
Febr. 1	22.07
9	21.88

ε ERIDANI

1819 Jan. 13	3	24	24.18
Febr. 1			24.02
9			24.14
12			23.99

ALCYONE

1819 Jan. 6	3	36	44.16
13			44.42
31			44.34
Febr. 1			44.28
11			44.32
12			44.25

ζ PERSEI

1819 Jan. 31	3	42	46.45
Febr. 1			46.40

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
ζ PERSEI	
1819 Feb. 11	3h 42′ 46″.51
12	46.38
ε PERSEI	
1819 Jan. 31	3 45 44.00
Febr. 1	44.07
11	44.04
γ ERIDANI	
1819 Jan. 29	3 49 35.42
31	35.41
Febr. 1	35.31
3	35.36
9	35.47
10	35.35
11	35.37
12	35.38
14	55.57
γ TAURI	
1819 Jan. 28	4 9 30.03
29	30.04
30	30.00
Febr. 1	29.97
2	29.94
3	30.11
6	29.99
9	29.96

Tempus Observationis	Adscens. recta media ad init. 1819.
γ TAURI	
1819 Feb. 10	4h 9′ 30″.09
11	29.96
12	30.05
14	30.09
δ 1 TAURI	
1818 Dec. 25	4 12 30.18
1819 Jan. 28	30.41
29	30.26
30	30.31
Febr. 1	30.34
2	30.11
3	30.25
6	30.20
9	30.24
10	30.32
11	30.21
12	30.31
14	30.36
ε TAURI	
1819 Jan. 28	4 18 3.56
29	3.49
30	3.47
Febr. 1	3.34
2	3.36
3	3.44
6	3.36
9	3.17
10	3.30

Tempus Observationis	Adscens. recta media ad init. 1819.
ε TAURI	
1819 Feb. 11	4h 18′ 3″.31
12	3.43
14	3.41
16	3.38
ALDEBARAN	
1818 Aug. 12	4 25 32.56
18	32.49
19	32.55
22	32.49
25	32.51
27	32.56
28	32.57
Dec. 25	32.70
1819 Jan. 28	32.52
29	32.44
30	32.53
Febr. 1	32.48
2	32.57
3	32.41
6	32.44
9	32.35
10	32.47
12	32.37
14	32.55
16	32.67
Mart. 7	32.65
8	32.61
10	32.57
22	32.59
23	32.69
27	32.60

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
ALDEBARAN	
1819 Mart. 30	4h 25′ 32.″56
31	32.58
Apr. 2	32.67
3	32.69
4	32.61
6	32.49
7	32.47
11	32.46
13	32.53
14	32.48
15	32.63
16	32.56
17	32.64
19	32.52
21	32.34
22	32.50
Maii 17	32.50
18	32.47
19	32.56
20	32.74
21	32.65
26	32.74
Junii 1	32.30
13	32.45
15	32.54
24	32.56
25	32.53
26	32.35
27	32.37
28	32.36
29	32.51

Tempus Observationis	Adscens. recta media ad init. 1819.
υ 2 ERIDANI	
1819 Jan. 28	4h 28′ 30.″77
29	30.75
Febr. 1	30.71
3	30.89
6	30.55
9	30.75
10	30.78
11	30.87
12	30.73
14	30.84
54 ERIDANI	
1819 Jan. 28	4 32 31.52
29	31.55
30	31.53
Febr. 1	31.31
3	31.62
6	31.35
9	31.35
10	31.32
11	31.50
12	31.41
14	31.56
β ERIDANI	
1819 Jan. 25	4 58 57.26
28	57.08
29	57.16
30	57.03
Febr. 1	57.27

Tempus Observationis	Adscens. recta media ad init. 1819.
β ERIDANI	
1819 Febr. 3	4h 58′ 56.″97
6	57.26
9	56.99
10	57.25
11	56.98
12	57.28
15	57.02
Mart. 7	57.25
8	57.13
10	57.09
CAPELLA	
1819 Aug. 3	5 3 19.72
5	19.75
6	19.73
7	19.70
8	19.75
10	19.70
12	19.70
17	20.02
18	19.94
19	20.03
20	19.82
22	19.81
25	19.79
30	19.98
31	19.94
Sept. 1	19.90
2	20.03
3	19.83
5	20.03
8	20.05

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
CAPELLA	
1818 Sept. 12	5h 3′ 20.″01
1819 Jan. 16	19.86
17	19.97
20	19.85
21	19.95
22	19.93
23	19.99
25	19.74
28	19.95
29	19.79
30	19.91
Febr. 1	19.90
3	19.81
6	19.70
9	19.82
10	19.93
11	19.85
12	20.01
13	19.72
14	19.95
15	19.95
Mart. 7	19.99
8	19.90
9	20.00
10	20.10
11	20.04
16	19.92
22	20.04
Apr. 4	20.02
6	20.08
7	20.01
11	19.92
13	20.03
14	20.09

Tempus Observationis	Adscens. recta media ad init. 1819.
CAPELLA	
1819 Apr. 15	5h 3′ 19.″90
16	19.98
17	20.06
19	20.00
21	19.94
Maii 7	20.05
8	19.91
11	19.90
23	20.10
Junii 1	19.94
2	20.10
4	19.95
5	19.77
6	20.00
13	19.85
14	19.89
15	19.84
22	19.76
24	19.82
25	19.81
27	19.90
28	19.92
RIGEL	
1818 Aug. 3	5 5 50.64
6	50.63
7	50.46
8	50.56
10	50.55
18	50.38
19	50.45
20	50.34

Tempus Observationis	Adscens. recta media ad init. 1819.
RIGEL	
1818 Aug. 22	5h 5′ 50.″49
28	50.43
30	50.41
31	50.41
Sept. 2	50.43
3	50.30
8	50.42
12	50.30
1819 Jan. 16	50.38
17	50.36
20	50.40
21	50.38
22	50.38
25	50.30
28	50.25
29	50.40
30	50.25
Febr. 1	50.29
3	50.42
6	50.41
9	50.27
10	50.27
11	50.23
12	50.32
13	50.55
14	50.20
15	50.29
Mart. 8	50.31
9	50.20
10	50.37
16	50.55
22	50.33
Apr. 4	50.52
6	50.58

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
RIGEL	
1819 Apr. 7	5h 5′ 50.″42
11	50. 31
13	50. 38
14	50. 21
15	50. 43
16	50. 35
17	50. 21
19	50. 53
Maii 3	50. 38
7	50. 43
8	50. 54
29	50. 40
Junii 2	50. 24
4	50. 49
5	50. 57
13	50. 39
14	50. 50
15	50. 40
21	50. 44
22	50. 32
24	50. 39
25	50. 51
28	50. 29
τ ORIONIS	
1819 Jan. 16	5 8 49. 10
17	48. 84
22	48. 79
23	48. 96
28	48. 98
29	49. 12
30	49. 16

Tempus Observationis	Adscens. recta media ad init. 1819.
τ ORIONIS	
1819 Febr. 3	5h 8′ 48.″95
6	49. 01
9	48. 97
10	49. 20
11	48. 90
13	48. 96
14	49. 11
15	49. 01
Mart. 7	49. 16
8	49. 12
9	49. 11
10	49. 05
β TAURI	
1818 Aug. 3	5 14 51. 28
5	51. 31
6	51. 26
7	51. 19
8	51. 17
10	51. 12
17	51. 24
18	51. 42
19	51. 46
20	51. 28
22	51. 29
25	51. 30
28	51. 31
30	51. 30
31	51. 29
Sept. 1	51. 31
2	51. 47
3	51. 40

Tempus Observationis	Adscens. recta media ad init. 1819.
β TAURI	
1818 Sept. 6	5h 14′ 51.″54
7	51. 31
8	51. 49
1819 Jan. 16	51. 25
17	51. 26
20	51. 37
21	51. 30
22	51. 11
23	51. 18
25	51. 45
28	51. 30
29	51. 23
30	51. 33
Febr. 1	51. 27
2	51. 37
3	51. 31
6	51. 29
8	51. 24
9	51. 17
10	51. 31
11	51. 21
12	51. 37
13	51. 20
14	51. 27
15	51. 18
Mart. 7	51. 34
8	51. 22
9	51. 21
10	51. 21
16	51. 46
22	51. 37
23	51. 33
31	51. 38
Apr. 4	51. 25

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
β TAURI	
1819 Apr. 7	5h 14′ 51.″41
15	51. 50
16	51. 47
17	51. 43
19	51. 45
Maii 3	51. 44
Junii 22	51. 23
27	51. 41
β LEPORIS	
1819 Jan. 16	5 20 29. 02
17	29. 13
20	29. 16
21	29. 21
22	29. 15
23	29. 25
25	29. 30
28	29. 37
Febr. 1	29. 35
2	29. 35
3	29. 24
6	29. 15
9	29. 22
10	29. 27
11	29. 39
12	29. 29
15	29. 06
Mart. 7	29. 43
8	29. 07
10	29. 16

Tempus Observationis	Adscens. recta media ad init. 1819.
δ ORIONIS	
1819 Jan. 16	5h 22′ 45.″35
17	45. 37
20	45. 43
21	45. 33
22	45. 44
23	45. 58
25	45. 59
28	45. 65
29	45. 66
30	45. 68
Febr. 3	45. 55
6	45. 35
8	45. 63
9	45. 57
10	45. 64
12	45. 65
15	45. 30
Mart. 10	45. 66
13	45. 65
16	45. 49
22	45. 65
23	45. 64
27	45. 55
31	45. 41
Apr. 4	45. 31
α LEPORIS	
1819 Jan. 17	5 24 44. 80
20	44. 59
21	44. 68
22	44. 66
25	44. 66

Tempus Observationis	Adscens. recta media ad init. 1819.
α LEPORIS	
1819 Jan. 28	5h 24′ 44.″71
29	44. 85
30	44. 86
Febr. 1	44. 58
2	44. 85
6	44. 72
9	44. 70
10	44. 82
12	44. 81
14	44. 80
15	44. 68
Mart. 7	44. 66
8	44. 79
10	44. 74
ε ORIONIS	
1819 Jan. 22	5 27 1. 55
23	1. 69
25	1. 78
28	1. 62
29	1. 76
30	1. 77
Febr. 1	1. 80
2	1. 82
3	1. 70
8	1. 70
9	1. 68
10	1. 73
11	1. 71
14	1. 70
15	1. 82
Mart. 8	1. 73

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

ε ORIONIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1819 Mart. 9	5h 27′ 1″74
10	1.67
19	1.81
22	1.59
23	1.73
27	1.52
31	1.70
Apr. 4	1.48

ζ ORIONIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1818 Sept. 22	5 31 37.41
1819 Jan. 23	37.35
Febr. 3	37.44
Mart. 13	37.51
22	37.63
23	37.64
27	37.38
13	37.45

α COLUMBAE

Tempus Observationis	Adscens. recta media ad init. 1819.
1819 Jan. 16	5 33 5.57
17	5.58
20	5.60
21	5.54
22	5.47
25	5.60
28	5.81
30	5.48
Febr. 1	5.56
2	5.77

α COLUMBAE

Tempus Observationis	Adscens. recta media ad init. 1819.
1819 Feb. 6	5h 33′ 5″65
8	5.53
9	5.54
10	5.61
11	5.73
12	5.68
14	5.49
15	5.66
Mart. 8	5.60
9	5.58
10	5.55

γ LEPORIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1819 Jan. 16	5 36 54.91
17	54.86
20	54.02
21	54.89
22	54.74
25	54.89
28	54.73
29	54.70
30	54.72
Febr. 1	54.86
2	55.08
3	55.02
6	54.87
8	54.92
10	54.88
12	54.90
14	54.75
15	54.93
Mart. 7	55.08

γ LEPORIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1819 Mart. 8	5h 36′ 54″81
9	54.74
10	54.73

κ ORIONIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1819 Jan. 16	5 39 10.21
20	10.27
21	10.21
22	10.27
23	10.39
25	10.03
28	10.24
29	10.33
30	10.42
Feb. 1	10.16
2	10.37
3	10.25
6	10.19
9	10.28
10	10.12
12	10.10
14	10.08
15	10.10
Mart. 8	10.10
9	10.33
16	10.36
19	10.33
23	10.20
27	10.18

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta med. ad init. 1819.	Tempus Observationis	Adscens. recta med. ad init. 1819.	Tempus Observationis	Adscens. recta media ad init. 1819.
α ORIONIS		α ORIONIS		α ORIONIS	
1818 Aug. 2	5h 45′ 22.″34	1819 Feb. 1	5h 45′ 22.″14	1819 Maii 7	5h 45′ 22.″41
3	22. 18	2	22. 37	8	22. 42
5	22. 33	3	22. 43	11	22. 35
6	22. 22	6	22. 22	12	22. 43
7	22. 38	8	22. 21	13	22. 41
10	22. 41	9	22. 19	15	22. 30
18	22. 16	10	22. 21	17	22. 42
19	22. 38	12	22. 16	18	22. 22
22	22. 22	13	22. 41	Junii 12	22. 20
25	22. 43	14	22. 28	22	22. 36
28	22. 28	15	22. 17	24	22. 16
30	22. 16	Mart. 7	22. 28	27	22. 45
31	22. 26	8	22. 36		
Sept. 1	22. 32	9	22. 28	ε GEMINORUM	
2	22. 13	10	22. 26		
3	22. 43	13	22. 37	1818 Sept. 22	6 32 47. 43
6	22. 15	16	22. 43	1819 Mart. 7	47. 32
7	22. 32	19	22. 22	9	47. 42
8	22. 33	22	22. 20	10	47. 31
12	22. 45	23	22. 19	23	47. 34
15	22. 49	27	22. 34	27	47. 39
22	22. 39	29	22. 49	29	47. 36
Oct. 9	22. 32	31	22. 31	31	47. 35
1819 Jan. 16	22. 48	Apr. 4	22. 28		
17	22. 30	6	22. 35	SIRIUS	
19	22. 40	7	22. 29		
20	22. 36	9	22. 33	1818 Aug. 18	6 37 9. 89
21	22. 29	13	22. 37	19	9. 95
22	22. 46	14	22. 36	22	10. 00
23	22. 11	15	22. 32	25	10. 14
25	22. 24	16	22. 34	28	9. 93
29	22. 47	17	22. 41	29	9. 98
30	22. 18	19	22. 46		
31	22. 18	23	22. 38		

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
SIRIUS	
1818 Aug. 31	6h 37' 9.″92
Sept. 2	9.91
3	9.95
6	10.01
7	9.97
8	9.98
12	10.11
16	10.03
21	9.99
22	10.08
23	10.08
Oct. 9	10.01
1819 Mart. 7	9.93
8	9.88
9	9.95
10	9.96
13	10.12
16	9.98
23	10.04
27	9.98
29	9.99
31	9.94
Apr. 4	9.99
6	9.84
7	9.78
8	9.89
9	9.98
15	9.93
16	9.94
17	9.91
19	9.88
20	9.90
Maii 4	10.02
7	10.12

Tempus Observationis	Adscens. recta media ad init. 1819.
SIRIUS	
1819 Maii 8	6h 37' 9.″99
12	10.03
13	10.07
15	10.03
17	9.94
18	9.85
19	9.99
21	10.03
23	9.97
27	9.97
28	10.07
β CANIS MINOR.	
1819 Mart. 9	7 17 19.78
16	19.69
24	19.75
29	19.81
Apr. 4	19.67
9	19.62
CASTOR SEQ.	
1818 Aug. 3	7 23 1.89
4	1.86
18	2.01
22	1.93
25	1.93
31	2.01
Sept. 3	1.97
7	2.06
12	1.99

Tempus Observationis	Adscens. recta media ad init. 1819.
CASTOR SEQ.	
1818 Sept. 16	7h 23' 2.″05
1819 Mart. 7	1.99
8	2.06
9	2.02
10	1.93
16	1.84
24	1.94
27	1.94
29	1.93
30	2.01
Apr. 2	2.01
4	2.02
6	1.95
9	2.02
13	2.00
14	2.04
15	2.00
16	2.16
17	2.01
19	1.89
20	2.20
23	2.14
Maii 2	1.95
8	2.10
9	2.00
12	2.09
13	1.98
14	2.09
17	2.03
18	2.15
19	2.19
20	2.15
21	2.07
22	1.85

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.	Tempus Observationis	Adscens. recta media ad init. 1819.	Tempus Observationis	Adscens. recta media ad init. 1819.
CASTOR SEQ.		**PROCYON**		**PROCYON**	
1819 Maii 23	$7^h\ 25'\ 1.''93$	1819 Mart. 10	$7^h\ 29'\ 49.''12$	1819 Junii 1	$7^h\ 29'\ 49.''19$
24	2. 14	16	49. 14	4	48. 99
25	2. 08	19	49. 22	16	49. 10
27	1. 89	24	49. 21		
Junii 1	1. 97	27	48. 93	**POLLUX**	
4	1. 83	29	49. 02		
		30	49. 16	1818 Aug. 4	$7\ 34\ 13.51$
PROCYON		Apr. 2	48. 98	6	13. 35
		4	48. 83	7	13. 32
1818 Aug. 3	$7\ 29\ 49.18$	6	49. 00	10	13. 35
6	49. 26	7	48. 99	17	13. 51
7	49. 25	9	49. 23	18	13. 45
8	48. 98	10	49. 21	19	13. 27
10	49. 25	13	49. 01	22	13. 46
18	49. 30	14	49. 04	25	13. 46
19	48. 96	15	49. 00	31	13. 59
25	49. 06	16	48. 92	Sept. 1	13. 46
29	49. 24	17	48. 90	2	13. 44
31	49. 22	19	49. 18	3	13. 52
Sept. 2	49. 08	20	49. 12	7	13. 50
3	49. 08	22	49. 02	12	13. 42
7	49. 15	Maii 2	49. 10	21	13. 46
12	49. 20	8	49. 08	22	13. 51
16	49. 21	12	49. 21	23	13. 50
21	49. 04	13	49. 16	Oct. 6	13. 34
22	49. 14	14	49. 23	7	13. 37
Oct. 6	49. 21	15	49. 25	8	13. 28
7	49. 18	17	49. 12	22	13. 47
22	49. 16	21	49. 21	Nov. 9	13. 48
Nov. 9	49. 12	22	49. 00	11	13. 46
1819 Mart. 7	49. 22	23	49. 30	1819 Mart. 7	13. 34
8	49. 06	24	49. 19	8	13. 41
9	49. 10	25	48. 92	10	13. 50
		27	49. 01		

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
POLLUX	
1819 Mart. 16	7^h 34′ 13.″40
19	13. 51
24	13. 43
27	13. 54
29	13. 54
30	13. 38
Apr. 2	13. 55
4	13. 34
6	13. 44
7	13. 52
8	13. 44
9	13. 46
10	13. 31
13	13. 45
15	13. 43
16	13. 52
17	13. 41
19	13. 29
22	13. 36
Maii 2	13. 51
8	13. 38
9	13. 41
12	13. 50
13	13. 53
14	13. 52
15	13. 49
17	13. 38
18	13. 48
19	13. 43
20	13. 35
21	13. 40
23	13. 47
24	13. 37
25	13. 44

Tempus Observationis	Adscens. recta media ad init. 1819.
POLLUX	
1819 Junii 1	7^h 34′ 13.″33
4	13. 21
16	13. 50
21	13. 33
ξ ARGONAVIS	
1819 Mart. 30	7 41 40. 66
Apr. 2	40. 66
4	40. 81
6	40. 70
7	40. 76
β CANCRI	
1819 Mart. 30	8 6 41. 30
Apr. 7	41. 01
14	40. 99
15	41. 17
16	41. 31
17	40. 99
22	41. 05
α 2 CANCRI	
1818 Nov. 9	8 48 34. 38
1819 Mart. 30	34. 63
Apr. 6	34. 51
7	34. 37
8	34. 57
15	34. 39
16	34. 24

Tempus Observationis	Adscens. recta media ad init. 1819.
ALPHARD	
1818 Sept. 21	9^h 18′ 41.″33
22	41. 16
23	41. 19
Oct. 8	41. 25
9	41. 23
12	41. 19
22	41. 27
24	41. 40
27	41. 41
28	41. 37
29	41. 35
30	41. 27
31	41. 42
Nov. 9	41. 32
11	41. 29
15	41. 32
24	41. 10
30	41. 16
1819 Mart. 27	41. 42
29	41. 39
30	41. 16
Apr. 4	41. 28
5	41. 20
6	41. 39
7	41. 39
12	41. 21
13	41. 24
14	41. 36
15	41. 37
16	41. 35
17	41. 28
Maii 3	41. 25
12	41. 38
15	41. 41

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
ALPHARD	
1819 Maii 16	9h 18′ 41.″25
17	41. 47
19	41. 26
21	41. 31
22	41. 17
24	41. 40
25	41. 48
Junii 1	41. 24
4	41. 18
21	41. 41
24	41. 19
REGULUS	
1818 Aug. 5	9 58 43. 32
Sept. 7	43. 37
16	43. 22
21	43. 14
22	43. 16
23	43. 18
Oct. 9	43. 16
12	43. 12
22	43. 23
24	43. 34
26	43. 12
27	43. 24
30	43. 13
31	43. 02
Nov. 7	43. 19
8	43. 11
9	43. 33
11	43. 25
12	43. 16

Tempus Observationis	Adscens. recta media ad init. 1819.
REGULUS	
1818 Nov. 13	9h 58′ 43.″07
14	43. 25
15	43. 09
18	43. 38
26	43. 27
30	43. 24
Dec. 13	43. 19
1819 Apr. 8	43. 36
10	43. 19
13	43. 11
14	43. 23
15	43. 09
16	43. 02
17	43. 29
20	43. 09
22	43. 04
Maii 2	43. 14
3	43. 04
4	43. 24
12	43. 17
14	43. 14
17	43. 14
18	43. 31
19	43. 37
21	43. 33
22	43. 06
29	43. 23
Junii 1	43. 16
2	43. 36
4	43. 08
14	43. 36
24	43. 32
28	43. 19

Tempus Observationis	Adscens. recta media ad init. 1819.
λ URSAE MAIOR.	
1818 Nov. 26	10h 6′ 8.″02
30	8. 06
1819 Maii 2	8. 23
4	8. 25
12	8. 28
14	8. 24
19	8. 26
21	8. 16
22	8. 13
γ LEONIS	
1818 Oct. 17	10 9 58. 48
22	58. 44
26	58. 58
27	58. 66
28	58. 40
30	58. 43
31	58. 54
Nov. 7	58. 65
9	58. 58
11	58. 64
12	58. 41
13	58. 54
14	58. 59
15	58. 63
18	58. 56
30	58. 41
Dec. 13	58. 45
1819 Apr. 10	58. 51
22	58. 41
Maii 2	58. 44
3	58. 55

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

γ LEONIS

Tempus Observationis	Adscens. rect. media ad init. 1819.
1819 Maii 4	10h 9′ 58.″54
12	58.56
14	58.42
19	58.57
21	58.61
22	58.42
Junii 1	58.40
2	58.63
23	58.65
24	58.53
28	58.57

δ LEONIS

Tempus Observationis	Adscens. rect. media ad init. 1819.
1819 Apr. 23	11 4 27.92
Maii 4	27.99
8	27.90
12	28.02
14	27.77
17	27.82
19	27.79
21	27.97

ν URSAE MAIORIS

Tempus Observationis	Adscens. rect. media ad init. 1819.
1819 Maii 4	11 8 40.59
7	40.63
8	40.47
12	40.41
14	40.46
17	40.51
19	40.43
21	40.43

σ LEONIS

Tempus Observationis	Adscens. rect. media ad init. 1819.
1819 Apr. 23	11h 11′ 47.″99
Maii 4	47.94
7	48.08
8	47.68
12	48.00
14	47.69
17	47.82
19	47.74
21	47.68

γ HYDRAE

Tempus Observationis	Adscens. rect. media ad init. 1819.
1819 Maii 4	11 15 50.89
8	50.70
12	50.86
14	50.64
19	50.89

τ LEONIS

Tempus Observationis	Adscens. rect. media ad init. 1819.
1819 Apr. 23	11 18 37.33
Maii 3	37.46
8	37.39
12	37.37
14	37.49
17	37.50
19	37.47
21	37.44

ζ CRATERIS

Tempus Observationis	Adscens. rect. media ad init. 1819.
1819 Apr. 23	11h 35′ 35.″67
Maii 3	35.71
4	35.94
8	35.75
12	35.79
14	35.77
17	35.69
19	35.85
21	35.83

DENEBOLA

Tempus Observationis	Adscens. rect. media ad init. 1819.
1818 Aug. 3	11 39 48.86
Oct. 17	49.10
18	49.10
22	49.06
24	49.06
26	49.06
27	48.98
30	49.05
31	48.87
Nov. 9	48.85
11	49.03
13	48.87
14	49.07
29	49.14
30	49.00
Dec. 13	49.10
22	49.06
23	49.14
24	49.19
1819 Apr. 23	49.05
Maii 3	48.81

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
DENEBOLA	
1819 Maii 4	11h39′ 49.″10
8	49. 07
12	49. 08
14	48. 86
16	48. 93
17	48. 94
19	48. 87
21	48. 96
22	49. 19
26	49. 10
29	49. 00
30	49. 10
Junii 1	49. 20
2	49. 21
20	49. 15
24	48. 99
26	49. 06
28	49. 14
β VIRGINIS	
1818 Dec. 23	11 41 15. 86
1819 Maii 7	15. 86
γ URSAE MAIOR.	
1818 Nov. 29	11 44 15. 37
Dec. 13	15. 28
22	15. 58
23	15. 20
1819 Maii 14	15. 34
16	15. 46

Tempus Observationis	Adscens. recta media ad init. 1819.
γ URSAE MAIOR.	
1819 Maii 17	11h44′ 15.″58
22	15. 54
Junii 1	15. 45
28	15. 45
α CORVI	
1818 Nov. 30	11 59 5. 79
Dec. 13	5. 74
22	5. 61
23	5. 66
24	5. 58
1819 Maii 4	5. 79
8	5. 54
16	5. 68
17	5. 48
19	5. 43
30	5. 63
Junii 1	5. 76
2	5. 68
3	5. 80
γ CORVI	
1819 Maii 4	12 6 30. 62
8	30. 45
16	30. 26
17	30. 35
19	30. 30
30	30. 56
Junii 1	30. 35
2	30. 56
3	30. 66

Tempus Observationis	Adscens. recta media ad init. 1819.
η VIRGINIS	
1818 Nov. 29	12h10′ 38.″97
1819 Maii 4	38. 85
8	38. 86
16	38. 87
17	38. 67
19	38. 79
22	38. 76
30	38. 87
Junii 1	38. 69
2	38. 84
3	38. 93
δ CORVI	
1819 Maii 16	12 20 30. 63
17	30. 43
19	30. 55
22	30. 39
30	30. 64
Junii 1	30. 34
2	30. 66
β CORVI	
1819 Maii 16	12 24 53. 95
17	53. 65
19	53. 80
22	53. 67
Junii 1	53. 61
2	53. 83
3	53. 95

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
γ VIRGINIS	
1818 Dec. 25	12h32′ 29.″19
1819 Maii 13	29.36
14	29.09
17	29.21
19	29.27
22	29.27
24	29.23
Junii 1	29.06
δ VIRGINIS	
1818 Dec. 25	12 46 29.15
1819 Maii 13	29.32
SPICA VIRGINIS	
1818 Aug. 6	13 15 40.29
7	40.19
10	40.27
21	39.94
25	40.28
26	39.97
Sept. 2	40.06
6	40.10
7	39.83
8	39.89
9	40.20
23	40.04
Oct. 22	39.96
31	40.16
Nov. 11	40.24
14	39.92

Tempus Observationis	Adscens. recta media ad init. 1819.
SPICA VIRGINIS	
1818 Dec. 21	13h15′ 39.″99
23	39.98
25	40.03
28	40.09
31	40.05
1819 Jan. 2	40.03
3	39.84
6	39.98
23	40.04
31	39.89
Maii 16	40.17
17	40.21
19	39.92
20	40.00
22	39.96
24	40.01
27	40.14
29	40.03
30	40.02
Junii 1	39.80
3	39.84
4	39.81
7	40.11
13	40.05
20	40.03
21	39.85
23	40.07
24	40.20
27	40.04
28	40.22

Tempus Observationis	Adscens. recta media ad init. 1819.
ζ VIRGINIS	
1819 Jan. 4	13h25′ 28.″42
6	28.65
Maii 20	28.41
24	28.31
27	28.61
29	28.31
Junii 7	28.57
21	28.45
η URSAE MAIOR.	
1818 Aug. 16	13 40 23.56
17	23.41
19	23.49
21	23.55
28	23.49
Dec. 21	23.51
22	23.72
23	23.56
24	23.68
25	23.65
1819 Jan. 13	23.55
17	23.58
28	23.58
30	23.55
Febr. 2	23.68
Maii 20	23.76
24	23.68
27	23.65
29	23.71
30	23.76
Junii 21	23.88
23	23.66

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

η BOOTIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1818 Dec. 29	13h46′ 3″.85
1819 Jan. 3	3.54
4	3.73
6	3.65
13	3.65
17	3.55
19	3.79
20	3.55
21	3.76
23	3.75
31	3.71
Maii 20	3.80
24	3.80
27	3.84
29	3.83
Junii 4	3.68
7	3.60
20	3.90
21	3.88
23	3.72

τ VIRGINIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1818 Dec. 29	13 52 26.23
31	26.19
1819 Jan. 2	26.25
3	26.06
4	26.36
13	26.12
17	26.03
18	26.17
19	26.21
21	26.17

τ VIRGINIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1819 Jan. 23	31h52′ 26″.18
30	26.27
31	26.14
Maii 20	26.40
29	26.36
Junii 2	26.24
4	26.18
7	36.41
20	26.34
21	26.37
23	26.40

ϑ CENTAURI

Tempus Observationis	Adscens. recta media ad init. 1819.
1818 Dec. 25	13 56 4.21
28	4.17
31	3.98
1819 Jan. 2	3.97
3	4.20
4	4.00
13	3.84
17	4.01
18	3.90
19	3.85
21	3.71
23	3.84
31	3.80
Maii 20	4.03
30	3.99
Junii 2	3.74
3	3.95
20	3.91
21	3.78

κ VIRGINIS

Tempus Observationis	Adscens. recta media ad init. 1819.
1818 Dec. 23	14h 3′ 15″.15
28	15.25
31	14.82
1819 Jan. 2	14.84
3	15.08
4	14.90
6	15.20
13	14.99
17	14.94
18	14.94
19	15.08
21	15.04
23	14.96
30	15.22
Maii 24	14.89
27	14.97
29	15.05
30	15.11
Junii 2	15.01
3	15.10
7	15.20
20	15.11
21	15.25
23	15.09
26	15.07

ARCTURUS

Tempus Observationis	Adscens. recta media ad init. 1819.
1818. Aug. 6	14 7 24.33
8	24.48
10	24.26
14	24.22
17	24.44

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
ARCTURUS	
1818 Aug. 21	14h 7′ 24.″23
26	24. 48
Sept. 7	24. 48
9	24. 34
Oct. 13	24. 23
16	24. 44
17	24. 44
18	24. 46
22	24. 49
24	24. 25
30	24. 32
Nov. 8	24. 32
9	24. 39
11	24. 51
13	24. 49
14	24. 46
15	24. 34
30	24. 21
Dec. 22	24. 24
23	24. 36
24	24. 33
25	24. 28
29	24. 42
31	24. 38
1819 Jan. 2	24. 19
3	24. 29
4	24. 27
6	24. 17
13	24. 14
17	24. 13
18	24. 29
19	24. 29
21	24. 27
23	24. 16

Tempus Observationis	Adscens. recta media ad init. 1819.
ARCTURUS	
1819 Jan. 30	14h 7′ 24.″28
31	24. 27
Maii 20	24. 31
24	24. 39
27	24. 38
29	24. 33
Junii 2	24. 42
3	24. 42
7	24. 34
13	24. 26
20	24. 36
21	24. 31
22	24. 25
23	24. 38
26	24. 30
27	24. 37
28	24. 47
109 VIRGINIS	
1819 Jan. 4	14 37 5. 93
18	6. 20
19	6. 24
21	6. 09
22	6. 01
23	6. 05
29	5. 95
31	6. 11
Junii 20	6. 25
22	5. 90

Tempus Observationis	Adscens. recta media ad init. 1819.
α 2 LIBRAE	
1818 Aug. 17	14h 40′ 52.″78
18	52. 71
Sept. 23	52. 66
Dec. 21	52. 69
23	52. 60
31	52. 87
1819 Jan. 3	52. 60
4	52. 84
13	52. 65
17	52. 50
18	52. 72
19	52. 82
21	52. 66
22	52. 63
23	52. 61
29	52. 80
31	52. 78
Febr. 2	52. 71
4	52. 55
Junii. 20	52. 85
22	52. 56
28	52. 80
β LIBRAE	
1819 Jan. 21	15 7 16. 48
22	16. 32
23	16. 43
29	16. 56
31	16. 43
Febr. 1	16. 65
2	16. 62
4	16. 56

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.	Tempus Observationis	Adscens. recta media ad init. 1819.	Tempus Observationis	Adscens. recta media ad init. 1819.
β CORONAE BOR.		**GEMMA**		**α SERPENTIS**	
1819 Jan. 3	$15^h20'\ 21.''63$	1818 Dec. 21	$15^h27'\ 1.''39$	1818 Aug. 4	$15^h35'\ 21.''29$
18	21.72	23	1.44	6	21.33
21	21.75	24	1.32	7	21.43
22	21.69	25	1.31	9	21.49
23	21.62	31	1.38	14	21.21
29	21.64	1819 Jan. 3	1.47	17	21.35
30	21.58	4	1.47	21	21.33
31	21.70	13	1.25	29	21.36
Febr. 1	21.72	17	1.23	Sept. 1	21.43
2	21.71	18	1.19	2	21.41
3	21.70	21	1.42	6	21.47
4	21.75	22	1.40	23	21.45
12	21.77	23	1.31	Dec. 12	21.17
Junii 22	21.76	29	1.54	21	21.30
GEMMA		30	1.49	23	21.32
		31	1.49	25	21.23
1818 Aug. 4	15 27 1.24	Febr. 1	1.35	1819 Jan. 3	21.48
5	1.31	2	1.22	4	21.25
6	1.46	3	1.20	13	21.41
7	1.43	4	1.46	17	21.31
8	1.38	10	1.46	18	21.46
9	1.38	12	1.34	21	21.50
14	1.35	14	1.33	22	21.34
15	1.48	Junii 11	1.21	23	21.45
17	1.31	12	1.11	30	21.32
21	1.38	15	1.17	31	21.50
29	1.53	22	1.29	Febr. 2	21.43
Sept. 1	1.52	24	1.23	4	21.11
2	1.54	26	1.31	10	21.16
7	1.53	28	1.40	12	21.11
23	1.49			14	21.39
Dec. 12	1.14			Junii 11	21.31
				12	21.34
				15	21.11

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
α SERPENTIS	
1819 Junii 22	15h35′ 21.″18
24	21.11
26	21.18
28	21.11
β SERPENTIS	
1819 Jan. 13	15 37 49.93
17	49.86
22	49.89
23	49.76
29	50.09
31	49.96
Febr. 1	50.11
2	49.99
3	49.79
4	49.95
10	50.00
12	49.84
14	49.96
Junii 11	49.89
12	49.99
15	49.86
22	49.78
26	49.85
28	50.06
ε SERPENTIS	
1819 Jan. 13	15 41 47.57
17	47.54
22	47.61

Tempus Observationis	Adscens. recta media ad init. 1819.
ε SERPENTIS	
1819 Jan. 23	15h41′ 47.″48
29	47.56
31	47.69
Febr. 1	47.80
2	47.71
3	47.65
4	47.85
10	47.85
12	47.77
14	47.68
Junii 12	47.53
14	47.64
15	47.71
δ SCORPII	
1819 Jan. 13	15 49 38.58
22	38.46
23	38.54
29	38.66
31	38.62
Febr. 1	38.67
2	38.69
4	38.41
10	38.58
12	38.62
14	38.68
15	38.42
Junii 11	38.73
12	38.40
15	38.50

Tempus Observationis	Adscens. recta media ad init. 1819.
β SCORPII	
1818 Sept. 5	15h54′ 55.″66
23	55.54
1819 Jan. 13	55.42
22	55.45
23	55.47
29	55.62
31	55.37
Febr. 2	55.37
4	55.48
10	55.52
12	55.36
14	55.42
15	55.34
Junii 11	55.40
12	55.37
14	55.49
15	55.31
24	55.39
δ OPHIUCHI	
1819 Jan. 13	16 4 51.79
22	51.63
23	51.76
29	51.80
Febr. 2	51.75
12	51.76
14	51.79
15	51.80
Junii 11	51.69
12	51.83
14	51.89
15	51.78

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
ε OPHIUCHI	
1819 Jan. 13	16h 8' 45.″06
31	44.83
Febr. 2	44.84
12	44.80
14	44.92
15	44.92
Junii 13	44.92
14	44.77
15	44.92
ANTARES	
1818 Aug. 17	16 18 19.00
18	19.26
19	19.14
21	19.15
Sep. 1	19.34
5	19.40
8	19.14
22	19.27
Oct. 16	19.43
18	19.43
22	19.47
24	19.30
27	19.43
28	19.37
29	19.05
30	19.21
Dec. 25	19.00
1819 Jan. 3	19.36
4	19.38
13	19.37
29	19.29

Tempus Observationis	Adscens. recta media ad init. 1819.
ANTARES	
1819 Jan. 31	16h 18' 19.″39
Febr. 2	19.23
10	19.25
12	19.34
14	19.31
15	19.23
16	19.17
Junii 11	19.30
12	19.00
13	19.25
14	19.14
15	19.16
β HERCULIS	
1819 Jan. 4	16 22 26.14
13	26.38
17	26.14
21	26.17
22	26.21
23	26.00
31	26.35
Febr. 2	26.01
10	26.34
12	26.13
14	26.21
15	26.30
16	26.31
Junii 11	26.18
12	26.00
13	26.21
14	26.22
15	26.00

Tempus Observationis	Adscens. recta media ad init. 1819.
ζ OPHIUCHI	
1819 Feb. 10	16h 27' 11.″98
15	11.74
16	11.70
Jun. 11	11.76
12	11.76
13	11.85
14	11.68
15	11.60
ζ HERCULIS	
1819 Feb. 10	16 34 27.58
16	27.63
Junii 11	27.35
12	27.41
13	27.43
14	27.37
15	27.34
μ 1 SCORPII	
1819 Junii 11	16 39 37.81
2	37.82
13	37.88
ε HERCULIS	
1819 Jun. 11	16 53 21.59
13	21.68
14	21.68
15	21.40

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
η OPHIUCHI	
1818 Sept. 6	17h 0′ 0.″22
1819 Febr. 4	0. 26
14	0. 38
Junii 12	0. 14
13	0. 10
α HERCULIS	
1818 Aug. 5	17 6 23. 57
14	23. 62
15	23. 82
17	23. 51
18	23. 67
19	23. 54
25	23. 70
Sept. 1	23. 62
2	23. 60
5	23. 88
6	23. 78
13	23. 75
1819 Feb. 4	23. 77
10	23. 81
14	23. 79
16	23. 63
Mart. 8	23. 67
9	23. 73
10	23. 70
Junii 11	23. 43
12	23. 44
13	23. 46
14	23. 52

Tempus Observationis	Adscens. recta media ad init. 1819.
ϑ OPHIUCHI	
1818 Sept. 6	17h 10′ 54.″05
1819 Mart. 8	53. 96
10	53. 90
Jun. 11	53. 89
12	53. 97
13	53. 94
14	53. 87
15	53. 71
υ SCORPII	
1819 Mart. 8	17 18 28. 04
Junii 11	28. 11
12	27. 99
13	28. 08
λ SCORPII	
1819 Mart. 8	17 21 19. 68
Junii 11	19. 59
12	19. 50
13	19. 51
α OPHIUCHI	
1818 Aug. 14	17 26 31. 97
17	31. 83
19	31. 75
21	31. 88
25	32. 03
Sept. 2	32. 04

Tempus Observationis	Adscens. recta media ad init. 1819.
α OPHIUCHI	
1818 Oct. 28	17h 26′ 31.″99
1819 Jan. 21	31. 82
23	31. 88
30	32. 04
31	31. 95
Febr. 1	32. 18
10	32. 03
14	31. 95
Mart. 8	32. 06
10	31. 95
12	32. 05
15	31. 97
β OPHIUCHI	
1819 Mart. 8	17 34 31. 89
10	31. 66
13	31. 73
15	31. 98
γ OPHIUCHI	
1819 Mart. 8	17 38 48. 92
13	48. 82
15	49. 00
μ 1 SAGITTARII	
1818 Aug. 16	18 2 56. 31
Sept. 13	56. 43
14	56. 53

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
μ 1 SAGITTARII	
1818 Sept. 15	18h 2′ 56.″37
16	56.45
22	56.35
1819 Mart. 24	56.27
η SERPENTIS	
1818 Aug. 16	18 11 56.64
Sept. 14	56.84
15	56.83
16	56.83
22	56.72
25	56.93
λ SAGITTARII	
1818 Aug. 16	18 16 47.89
1819 Mart. 23	48.05
24	47.97
WEGA	
1818 Aug. 15	18 30 48.69
16	48.69
17	48.52
18	48.57
19	48.58
21	48.48
25	48.66
Sept. 1	48.74
13	48.44
WEGA	
1818 Sept. 14	18h30′ 48.″46
Dec. 23	48.76
24	48.76
28	48.59
1819 Jan. 31	48.64
Febr. 1	48.52
3	48.42
6	48.46
Mart. 10	48.51
11	48.42
13	48.49
14	48.49
15	48.52
16	48.50
23	48.58
24	48.40
26	48.52
φ SAGITTARII	
1818 Sept. 13	18 34 20.86
14	20.57
16	20.50
21	20.50
25	20.61
ζ SAGITTARII	
1818 Sept. 21	18 51 5.15
25	5.27
δ AQUILAE	
1819 Mart. 14	19h16′ 22.″19
Apr. 2	22.23
3	22.24
4	22.20
7	22.15
8	22.09
12	22.08
13	22.21
14	22.20
15	22.11
16	22.03
19	22.24
20	22.16
21	22.09
β CYGNI	
1818 Aug. 30	19 23 25.52
31	25.35
1819 Mart. 14	25.16
April. 4	25.51
7	25.37
8	25.38
10	25.42
11	25.27
12	25.46
13	25.41
14	25.26
15	25.47
16	25.15
18	25.52
19	25.20
20	25.17
21	25.54

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
α SAGITTAE	
1818 Aug. 24	19h32′ 0.″20
27	0. 46
28	0. 11
29	0. 46
30	0. 25
31	0. 21
Sept. 1	0. 20
2	0. 27
3	0. 36
4	0. 32
γ AQUILAE	
1818 Aug. 16	19 37 39. 09
19	39. 06
24	39. 14
27	39. 14
28	39. 20
29	39. 08
30	39. 16
31	39. 12
Sept. 1	39. 07
3	39. 23
4	39. 27
6	39. 26
7	39. 18
9	39. 13
13	39. 15
14	39. 09
15	39. 07
16	38. 97
21	39. 27
22	39. 18
γ AQUILAE	
1818 Sept. 25	19h37′ 39.″15
Oct. 11	39. 02
16	39. 15
24	39. 04
26	39. 31
27	39. 19
28	39. 11
30	38. 96
Nov. 7	39. 04
11	39. 01
12	38. 90
13	39. 06
14	39. 12
18	38. 96
24	39. 08
29	39. 02
1819 Jan. 28	39. 00
Mart. 7	38. 90
8	39. 16
10	39. 18
11	39. 15
14	39. 09
16	39. 09
18	39. 18
22	39. 12
23	39. 00
24	39. 08
Apr. 1	39. 11
2	39. 13
7	39. 15
8	39. 21
11	38. 98
12	39. 18
13	39. 00
γ AQUILAE	
1819 Apr. 14	19h37′ 39.″14
15	39. 00
16	39. 09
18	39. 10
19	39. 07
20	39. 05
21	38. 92
Maii 19	38. 97
28	39. 24
ATAIR	
1818 Aug. 16	19 41 57. 03
24	57. 07
25	56. 88
27	57. 07
28	56. 91
29	56. 95
30	57. 04
31	57. 03
Sept. 1	57. 00
3	57. 13
4	57. 06
6	56. 91
9	56. 98
10	57. 19
13	57. 04
14	57. 05
15	57. 01
16	56. 99
21	56. 80
22	57. 03
25	56. 82

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
ATAIR	
1818 Oct. 11	$19^h41'\ 56''.93$
16	56.82
17	57.04
22	56.88
24	56.92
26	56.85
27	56.87
28	56.95
Nov. 7	56.85
11	56.82
12	57.12
13	56.89
14	57.06
18	56.85
24	57.08
29	56.84
1819 Jan. 3	57.19
4	56.96
21	56.92
23	56.90
28	56.96
31	56.92
Febr. 1	57.13
3	56.93
6	56.80
9	56.92
10	56.93
Mart. 7	56.81
8	57.82
10	57.09
11	57.07
13	57.10
14	57.10
16	56.99

Tempus Observationis	Adscens. recta media ad init. 1819.
ATAIR	
1819 Mart. 18	$19^h41'\ 56''.97$
22	56.81
23	56.94
24	57.03
Apr. 1	57.05
2	56.99
3	56.92
4	56.81
5	56.80
10	56.75
12	56.78
13	56.96
14	57.03
15	56.82
16	57.10
18	57.07
19	57.15
20	57.00
21	56.76
Maii 4	56.87
11	56.87
12	57.03
19	56.88
28	57.00
β AQUILAE	
1818 Aug. 16	19 46 25.07
24	25.04
25	24.96
27	25.25
28	25.13
29	25.10

Tempus Observationis	Adscens. recta media ad init. 1819.
β AQUILAE	
1818 Aug. 30	$19^h46'\ 25''.06$
31	25.10
Sept. 1	25.11
2	25.06
3	25.18
4	25.19
6	25.31
7	25.08
9	25.08
10	25.05
13	25.10
14	25.10
15	25.11
16	25.04
21	25.16
22	25.12
25	25.30
Oct. 9	24.97
11	25.21
16	25.30
22	25.17
24	25.00
26	25.06
27	25.19
28	25.11
30	25.26
Nov. 7	25.29
13	25.08
14	25.13
18	25.05
24	25.14
29	25.21
30	25.30
1819 Mart. 7	25.11

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
β AQUILAE	
1819 Mart. 8	19h 46′ 25.″22
10	24.97
11	25.07
14	25.19
23	25.01
24	25.09
Apr. 3	25.14
7	25.14
12	25.12
13	24.98
15	25.19
16	24.99
20	25.07
21	25.24
Maii 4	25.04
11	25.11
12	24.90
13	25.00
19	25.13
28	25.24
ϑ ANTINOI	
1818 Oct. 11	20 1 57.58
16	57.67
22	57.67
24	57.69
26	57.75
27	57.66
28	57.63
30	57.43
Nov. 7	57.60
11	57.55
ϑ ANTINOI	
1818 Nov. 13	20h 1′ 57.″62
14	57.61
18	57.68
24	57.69
30	57.69
1819 Maii. 11	57.50
12	57.65
13	57.51
19	57.70
28	57.50
α 2 CAPRICORNI	
1818 Sept. 2	20 7 59.99
3	8 0.21
6	0.14
7	0.00
10	0.23
14	0.17
15	0.23
16	0.18
21	0.16
22	0.04
25	0.10
Oct. 9	0.33
11	0.23
16	0.11
17	0.26
22	0.11
24	0.30
26	0.15
27	0.14
30	0.09
α 2 CAPRICORNI	
1818 Nov. 7	20h 8′ 0.″22
11	0.14
13	0.27
14	0.02
18	7 59.92
24	8 0.29
Dec. 1	0.26
1819 Apr. 2	0.28
7	0.01
10	0.21
12	0.03
13	7 59.98
14	8 0.11
16	0.32
19	0.03
21	0.02
22	7 59.92
Maii. 11	8 0.04
12	0.19
13	0.17
17	0.09
18	0.23
19	0.30
21	0.22
28	0.04
β 2 CAPRICORNI	
1818 Sept. 5	20 10 49.94
6	49.78
7	49.74
9	49.86
14	49.89

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
β 2 CAPRICORNI	
1818 Sept. 15	$20^h 10' 49.''90$
16	49.97
22	49.94
25	49.89
Oct. 9	49.96
11	49.91
16	49.92
22	50.00
24	50.11
26	49.95
27	49.98
28	49.87
30	49.76
Nov. 18	49.99
24	49.74
1819 Apr. 7	49.75
12	49.85
13	49.76
14	50.12
15	49.88
16	49.98
19	49.86
20	49.79
21	49.71
Maii 7	49.70
9	49.96
11	49.70
12	49.78
13	49.88
17	49.93
18	49.86
19	49.94
21	49.86
28	49.83

Tempus Observationis	Adscens. recta media ad init. 1819.
γ CYGNI	
1819 Maii 9	$20^h 15' 43.''97$
11	43.99
12	43.98
13	43.99
17	43.76
18	44.02
19	44.01
21	43.87
28	43.89
ε DELPHINI	
1819 Maii 9	20 24 33.89
11	34.05
12	33.79
13	34.09
18	33.79
19	33.80
21	33.77
28	33.90
β DELPHINI	
1819 Maii 9	20 29 3.76
11	3.65
12	3.65
13	3.61
17	3.50
18	3.56
19	3.56
21	3.45
28	3.62

Tempus Observationis	Adscens. recta media ad init. 1819.
α DELPHINI	
1819 Apr. 15	$20^h 31' 13.''53$
16	13.59
18	13.66
19	13.57
21	13.63
22	13.60
Maii 9	13.79
12	13.69
13	13.78
17	13.63
18	13.69
20	13.77
21	13.70
28	13.76
DENEB	
1818 Sept. 1	20 35 15.67
2	15.77
3	15.98
4	15.72
6	15.92
7	15.71
9	15.76
1819 Mart. 11	15.86
22	15.76
23	15.86
Apr. 1	15.96
2	15.92
5	15.80
7	15.69
10	15.85
13	15.69

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
DENEB	
1819 Apr. 14	20h35′ 15.″78
15	15.73
16	15.68
18	15.85
19	15.82
20	15.86
21	15.73
22	15.71
Maii 7	15.63
9	15.94
11	15.89
15	15.72
18	15.75
19	15.82
20	15.88
21	15.76
22	15.74
28	15.63
ε CYGNI	
1819 Maii 7	20 38 53.25
9	53.49
11	53.44
12	53.45
13	53.39
18	53.33
19	53.29
20	53.38
21	53.32
22	53.40
28	53.41

Tempus Observationis	Adscens. recta media ad init. 1819.
μ AQUARII	
1818 Sept. 4	20h42′ 52.″85
6	52.82
7	52.85
9	52.94
10	52.95
14	52.82
15	52.82
16	52.82
α CEPHEI	
1818 Dec. 12	21 14 14.88
24	15.31
1819 Maii 22	15.11
23	15.13
25	15.31
26	15.10
β AQUARII	
1818 Sept. 4	21 22 1.16
6	1.36
7	1.37
9	1.31
14	1.39
Oct. 12	1.11
16	1.35
17	1.24
22	1.33
26	1.40
27	1.43
29	1.33

Tempus Observationis	Adscens. recta media ad init. 1819.
β AQUARII	
1818 Oct. 30	21h22′ 1.″40
Nov. 8	1.37
11	1.30
13	1.39
14	1.39
18	1.43
23	1.08
24	1.37
29	1.26
30	1.37
Dec. 10	1.06
21	1.16
31	1.38
1819 Apr. 10	1.26
11	1.31
12	1.14
13	1.03
14	1.03
16	1.21
19	1.06
20	1.13
21	1.02
Maii 11	1.22
12	1.36
13	1.25
15	1.04
17	1.16
18	1.13
19	1.04
20	1.20
21	1.21
23	1.09
24	1.02
25	1.19

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
β AQUARII	
1819 Maii 28	21h22′ 1.″31
30	1.08
Junii 1	1.17
3	1.00
4	1.00
5	1.10
8	1.25
γ CAPRICORNI	
1818 Oct. 29	21 30 2.94
Nov. 8	2.77
11	2.99
13	2.98
14	2.89
23	2.70
24	2.81
29	2.88
30	2.76
Dec. 10	2.80
1819 Maii 11	2.87
13	2.71
19	2.67
25	2.79
Junii 4	2.62
5	2.66
8	2.78
ε PEGASI	
1818 Oct. 29	21 35 17.62
Nov. 8	17.68

Tempus Observationis	Adscens. recta media ad init. 1819.
ε PEGASI	
1818 Nov. 11	21h35′ 17.″68
14	17.76
23	17.70
24	17.51
29	17.59
30	17.75
Dec. 10	17.71
12	17.49
21	17.41
29	17.57
31	17.54
1819 Apr. 6	17.72
7	17.72
8	17.57
10	17.44
11	17.51
12	17.70
13	17.56
14	17.72
15	17.51
16	17.56
20	17.51
Maii 3	17.57
11	17.75
12	17.72
13	17.75
15	17.61
16	17.77
18	17.61
19	17.52
20	17.55
21	17.56
22	17.58
23	17.52

Tempus Observationis	Adscens. recta media ad init. 1819.
ε PEGASI	
1819 Maii 24	21h35′ 17.″52
25	17.56
Junii 1	17.72
3	17.51
4	17.51
5	17.62
8	17.73
α AQUARII	
1818 Sept. 1	21 56 28.79
2	28.92
3	29.00
4	28.83
6	29.02
7	28.83
9	28.89
14	28.74
15	28.98
16	29.09
21	28.73
22	28.85
24	28.80
25	28.85
27	29.10
Oct. 5	28.76
10	28.78
12	28.69
13	28.76
15	28.88
16	28.69
17	28.81
22	28.85

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
α AQUARII	
1818 Oct. 24	21h56′ 28.″93
26	28. 84
27	28. 87
28	28. 87
29	28. 85
30	29. 00
Nov. 7	29. 00
8	28. 73
11	28. 82
13	28. 88
14	28. 94
18	28. 81
23	28. 81
24	28. 89
29	28. 87
30	28. 97
Dec. 10	28. 82
12	28. 85
21	28. 99
24	28. 78
31	28. 89
1819 Jan. 1	28. 92
4	29. 01
5	28. 78
6	28. 75
7	28. 95
10	28. 99
11	28. 85
12	28. 87
13	28. 77
15	28. 72
16	28. 71
19	28. 71
20	28. 70

Tempus Observationis	Adscens. recta media ad init. 1819.
α AQUARII	
1819 Jan. 22	21h56′ 28.″67
Maii 9	28. 82
11	28. 91
12	28. 93
13	28. 97
15	28. 73
16	28. 80
18	28. 81
19	28. 82
20	28. 81
21	28. 72
22	28. 86
23	28. 84
24	28. 89
25	28. 65
28	28. 75
30	28. 82
Junii 1	28. 82
3	28. 92
4	28. 76
5	28. 70
7	28. 70
8	28. 83
ϑ PEGASI	
1818 Oct. 30	22 1 3. 85
Nov. 7	4. 03
8	3. 89
11	3. 94
13	4. 02
14	3. 92
18	3. 77

Tempus Observationis	Adscens. recta media ad init. 1819.
ϑ PEGASI	
1818 Nov. 23	22h 1′ 3.″67
24	3. 98
25	3. 97
29	3. 89
30	3. 84
Dec. 10	3. 83
12	3. 90
21	3. 95
24	3. 73
31	3. 86
1819 Jan. 1	3. 84
Maii 24	3. 86
Junii 3	3. 81
4	3. 74
5	3. 83
7	3. 71
8	3. 82
22	3. 89
ϑ AQUARII	
1818 Nov. 23	22 7 16. 44
24	16. 24
25	16. 41
30	16. 37
Dec. 10	16. 30
γ AQUARII	
1818 Sept. 1	22 12 17. 89
2	18. 01
4	17. 86

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
γ AQUARII	
1818 Sept. 7	22h12′ 17″.95
9	18.09
15	18.04
16	18.02
21	18.08
22	18.02
24	17.83
26	17.97
Oct. 5	18.02
10	18.01
11	17.95
12	17.93
13	18.16
15	18.00
16	17.99
17	18.10
24	17.96
26	18.00
27	18.16
28	17.96
29	18.06
30	18.17
Nov. 7	18.16
8	17.97
11	17.94
13	18.15
14	17.99
18	18.04
23	18.12
24	18.12
25	18.12
30	18.12
Dec. 10	18.09
12	17.89

Tempus Observationis	Adscens. recta media ad init. 1819.
γ AQUARII	
1818 Dec. 21	22h12′ 17″.99
24	18.16
31	18.23
1819 Jan. 1	18.00
Maii 24	18.09
Junii 4	17.91
5	18.13
7	17.96
8	18.05
22	18.15
27	17.99
ζ AQUARII	
1818 Sept. 2	22 19 30.27
3	30.49
4	30.40
6	30.25
7	30.22
9	30.41
14	30.47
15	30.47
16	30.47
21	30.42
22	30.26
24	30.36
26	30.37
Oct. 5	30.17
10	30.47
11	30.39
12	30.32
13	30.44
15	30.50

Tempus Observationis	Adscens. recta media ad init. 1819.
ζ AQUARII	
1818 Oct. 16	22h19′ 30.″15
17	30.32
22	30.44
24	30.41
26	30.12
27	30.33
29	30.22
30	30.40
Nov. 7	30.32
8	30.25
13	30.41
14	30.24
18	30.34
23	30.31
24	30.51
25	30.31
29	30.44
30	30.22
Dec. 10	30.39
12	30.30
21	30.31
24	30.34
31	30.49
1819 Jan. 1	30.41
Maii 24	30.40
Jun. 4	30.27
5	30.31
8	30.46
22	30.35
27	30.32

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
η AQUARII	
1818 Sept. 1	22h26′ 2.″91
2	3.02
4	2.88
5	3.09
6	3.08
7	2.86
9	2.86
14	3.18
15	3.14
16	3.16
21	3.14
22	3.03
24	2.81
26	2.81
Oct. 5	2.97
10	2.96
11	3.13
12	2.98
15	3.00
17	3.01
22	3.15
24	2.81
26	2.91
27	3.05
28	2.93
29	2.97
30	3.20
Nov. 7	3.04
8	2.91
11	2.82
13	2.87
14	3.01
18	3.06
23	2.96
η AQUARII	
1818 Nov. 24	22h26′ 2.″83
25	3.00
30	2.99
Dec. 10	2.86
21	3.14
24	3.15
31	3.15
1819 Junii 4	2.98
5	2.96
8	2.99
22	2.82
27	2.87
ζ PEGASI	
1818 Sept. 1	22 32 26.02
3	26.17
4	26.08
5	26.10
6	26.24
7	26.22
14	25.97
22	26.21
24	26.00
26	26.15
Oct. 11	25.98
13	25.90
Nov. 14	26.30
23	26.19
24	26.12
25	26.03
29	26.28
30	26.14
ζ PEGASI	
1818 Dec. 10	22h32′ 25.″92
12	26.08
21	26.15
1819 Junii 27	26.25
29	26.23
η PEGASI	
1818 Nov. 23	22 34 31.71
24	31.57
25	31.67
30	31.66
Dec. 10	31.57
21	31.41
24	31.72
1819 Jan. 13	31.68
Maii 25	31.62
Junii 1	31.55
3	31.40
4	31.40
5	31.60
8	31.63
22	31.71
23	31.66
25	31.54
27	31.48
29	31.44
δ AQUARII	
1818 Sept. 5	22 45 1.91
6	2.02

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
δ AQUARII	
1818 Sept. 7	22h45′ 1.″74
9	1.85
16	1.93
21	1.85
Oct. 5	1.86
11	2.00
12	1.86
13	1.99
15	1.77
16	1.93
17	1.72
22	1.90
24	1.81
26	1.92
27	1.76
28	1.70
29	1.95
30	1.97
Nov. 7	1.94
11	1.06
13	2.03
14	1.71
23	1.93
24	1.96
25	1.90
29	1.90
Dec. 10	1.72
17	1.95
21	1.75
24	1.90
1819 Maii 25	1.92
Junii 1	1.70
3	1.88
4	1.85

Tempus Observationis	Adscens. recta media ad init. 1819.
δ AQUARII	
1819 Junii 5	22h45′ 2.″09
8	1.89
13	1.92
FOMALHAUT	
1818 Aug. 28	22 47 37.54
30	37.47
31	37.48
Sept. 1	37.48
2	37.38
3	37.46
4	37.52
5	37.53
6	37.45
7	37.34
9	37.51
15	37.61
16	37.49
24	37.32
26	37.52
Oct. 5	37.48
11	37.49
12	37.52
13	37.48
15	37.42
16	37.63
17	37.32
22	37.69
24	37.61
26	37.55
27	37.46
28	37.62

Tempus Observationis	Adscens. recta media ad init. 1819.
FOMALHAUT	
1818 Oct. 29	22h47′ 37.″66
30	37.69
Nov. 13	37.62
14	37.44
23	37.65
24	37.37
25	37.51
29	37.62
30	37.62
Dec. 10	37.53
21	37.38
24	37.42
31	37.67
1819 Jan. 1	37.61
13	37.64
28	37.37
Maii 9	37.53
11	37.60
12	37.47
13	37.65
19	37.40
20	37.40
22	37.53
23	37.38
26	37.36
28	37.64
Junii 3	37.38
4	37.35
5	37.49
6	37.51
8	37.49
13	37.59
14	37.65
15	37.54

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
FOMALHAUT	
1819 Jun. 22	22h47′ 37.″41
23	37.49
27	37.51
β PEGASI	
1818 Sept. 7	22 55 0.84
1819 Maii. 9	0.71
11	0.78
12	0.73
20	0.65
26	0.67
Junii. 12	0.62
MARKAB	
1818 Aug. 28	22 55 45.05
30	44.86
31	44.93
Sept. 1	45.09
2	45.05
3	44.89
4	44.94
5	44.96
6	44.87
16	45.03
22	44.91
24	44.83
26	44.86
Oct. 5	44.80
9	44.97
11	45.04
MARKAB	
1818 Oct. 12	22h55′ 44.″96
13	44.78
15	44.97
16	44.74
17	44.90
22	44.80
24	44.88
26	44.82
27	44.89
28	44.82
29	44.72
30	44.98
Nov. 7	44.92
Dec. 10	44.83
17	44.85
21	44.93
24	44.97
30	44.86
31	44.80
1819 Jan. 1	44.82
4	44.76
13	44.89
22	45.00
23	44.91
28	44.87
Apr. 5	45.08
6	45.02
7	44.98
8	44.97
10	45.10
11	44.97
12	44.82
13	44.87
19	44.82
MARKAB	
1819 Apr. 20	22h55′ 44.″94
21	45.05
22	45.10
23	44.92
28	45.02
Maii 7	44.96
13	45.06
15	44.86
18	44.87
19	44.95
21	44.90
22	45.05
23	45.04
25	45.03
28	44.90
Junii 1	45.03
3	44.95
4	44.92
5	44.90
6	44.81
8	44.90
13	44.80
14	44.82
15	44.92
22	44.89
27	44.97
29	44.84
φ AQUARII	
1818 Sept. 3	23 4 56.41
6	56.49
7	56.41

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.
φ AQUARII	
1818 Sept. 8	23h 4′ 56″.38
9	56.58
24	56.42
26	56.60
Oct. 9	56.47
11	56.52
12	56.42
16	56.38
17	56.30
22	56.46
24	56.61
27	56.30
28	56.66
29	56.36
30	56.50
Nov. 7	56.30
8	56.56
11	56.48
13	56.65
14	56.30
18	56.61
24	56.51
25	56.30
29	56.41
30	56.55
Dec. 10	56.35
21	56.33
31	56.42
3 ↓ AQUARII	
1818 Nov. 25	23 9 32.00
29	32.31
3 ↓ AQUARII	
1818 Nov. 30	23h 9′ 32″.10
Dec. 10	32.20
21	32.31
λ PISCIUM	
1818 Aug. 30	23 32 48.44
31	48.49
Sept. 1	48.62
Oct. 21	48.47
1819 Jan. 3	48.68
ω PISCIUM	
1818 Aug. 28	23 50 1.21
30	1.29
31	0.91
Sept. 1	1.12
Oct. 21	1.04
Dec. 28	0.99
30	1.26
31	1.15
1819 Jan. 3	1.12
4	1.26
2 g CETE	
1818 Aug. 31	23 54 27.45
Sept. 1	27.52
Oct. 21	27.64
Dec. 28	27.54
2 g CETE	
1818 Dec. 31	23h 54′ 27″.71
1819 Jan. 3	27.76
4	27.77
α ANDROMEDAE	
1818 Aug. 18	23 59 2.79
Oct. 9	2.87
10	2.96
12	2.80
15	2.83
16	2.89
17	2.90
21	2.91
22	2.91
24	2.73
26	2.80
27	2.81
28	2.83
29	2.86
30	2.99
Nov. 11	2.85
13	2.94
14	3.01
18	2.91
23	2.78
24	3.09
25	2.77
Dec. 21	2.90
23	2.87
24	3.08
28	2.99
30	3.01

Adscensiones rectae mediae Stellarum inerrantium ad initium Anni 1819. reductae.

Tempus Observationis	Adscens. recta media ad init. 1819.	Tempus Observationis	Adscens. recta media ad init. 1819.	Tempus Observationis	Adscens. recta media ad init. 1819.
α ANDROMEDAE		α ANDROMEDAE		α ANDROMEDAE	
1818 Dec. 31	23h59′ 2″.91	1819 Apr. 14	23h59′ 3″.01	1819 Junii 4	23h59′ 2″.86
1819 Jan. 3	2.95	16	3.05	5	2.93
4	2.75	19	2.98	6	2.82
13	2.84	20	2.84	8	2.97
22	2.81	22	3.05	14	2.98
23	2.86	Maii 7	3.05	15	2.90
27	2.85	11	3.00	16	2.93
28	2.87	12	3.92	22	2.82
30	2.84	13	3.03	24	2.82
31	3.00	15	2.97	25	2.89
Febr. 2	2.99	16	2.85	26	2.94
Apr. 11	3.03	17	2.98	27	2.89
12	3.05	18	2.84	28	2.93
13	3.03	19	3.07	29	2.93

ADSCENSIONES RECTAE MEDIAE

CENTUM SEPTEM ET QUADRAGINTA STELLARUM

AD INITIUM ANNI 1819. REDUCTAE,

ET

E PRAECEDENTIBUS PER MEDIUM ARITHMETICUM DERIVATAE.

Nomen Stellae	Adscensio recta media	Num. Observ.	Nomen Stellae	Adscensio recta media	Num. Observ.
γ Pegasi	$0^h\ 3'\ 55''.41$	64	ξ Tauri	$3^h\ 17'\ 22''.10$	10
ι Cete	0 10 12.07	28	ε Eridani	3 24 24.08	4
β Cete	0 34 29.79	28	Alcyone	3 36 44.30	6
ε Piscium	0 53 33.30	10	ζ Persei	3 42 46.44	4
β Andromed.	0 59 37.43	8	ε Persei	3 45 44.03	3
β Arietis	1 44 39.51	2	γ Eridani	3 49 35.40	9
α Arietis	1 56 59.23	23	γ Tauri	4 9 30.02	12
41 Arietis	2 39 20.98	5	δ 1 Tauri	4 12 30.27	13
η Eridani	2 47 35.17	4	ε Tauri	4 18 3.39	13
α Cete	2 52 49.52	16	Aldebaran	4 25 32.53	57
Algol	2 56 25.63	12	υ 2 Eridani	4 28 30.76	10
δ Arietis	3 1 17.63	9	54 Eridani	4 32 31.46	11
ζ Eridani	3 7 2.86	6	β Eridani	4 58 57.14	15
α Persei	3 11 25.99	10	Capella	5 3 19.91	76

Adscensiones rectae mediae 147 Stellarum
ad initium Anni 1819. reductae.

Nomen Stellae	Adscensio recta media	Num. Observ.	Nomen Stellae	Adscensio recta media	Num. Observ.
Rigel	5^h 5′ 50.″39	65	η Virginis	12^h 10′ 38.″83	11
τ Orionis	5 8 49.03	19	δ Corvi	12 20 30.52	7
β Tauri	5 14 51.31	60	β Corvi	12 24 53.78	7
β Leporis	5 20 29.23	20	γ Virginis	12 32 29.21	8
δ Orionis	5 22 45.53	25	δ Virginis	12 46 29.24	2
α Leporis	5 24 44.73	19	Spica Virginis	13 15 40.04	46
ε Orionis	5 27 1.70	24	ζ Virginis	13 25 28.47	8
ζ Orionis	5 31 37.48	8	η Ursae maior.	13 40 23.62	22
α Columbae	5 33 5.60	21	η Bootis	13 46 3.73	20
γ Leporis	5 36 54.87	22	τ Virginis	13 52 26.24	21
κ Orionis	5 39 10.23	24	θ Centauri	13 56 3.94	19
α Orionis	5 45 22.32	80	κ Virginis	14 3 15.05	25
ε Geminor.	6 32 47.37	8	Arcturus	14 7 24.33	56
Sirius	6 37 9.98	51	109 Virginis	14 37 6.07	10
β Can. minor.	7 17 19.72	6	α 2 Librae	14 40 52.70	22
Castor seq.	7 23 2.01	49	β Librae	15 7 16.51	8
Procyon	7 29 49.11	61	β Coron. Bor.	15 20 21.70	14
Pollux	7 34 13.43	65	Gemma	15 27 1.36	46
ξ Argonavis	7 41 40.72	5	α Serpentis	15 35 21.32	38
β Cancri	8 6 41.12	7	β Serpentis	15 37 49.92	19
α 2 Cancri	8 49 34.44	7	ε Serpentis	15 41 47.67	16
Alphard	9 18 41.30	45	δ Scorpii	15 49 38.57	15
Regulus	9 58 43.20	52	β Scorpii	15 54 55.44	18
λ Urs. maior.	10 6 8.18	9	δ Ophiuchi	16 4 51.77	12
γ Leonis	10 9 58.52	32	ε Ophiuchi	16 8 44.89	9
δ Leonis	11 4 27.90	8	Antares	16 18 19.26	33
ν Ursae maior.	11 8 40.49	8	β Herculis	16 22 26.18	18
σ Leonis	11 11 47.85	9	ζ Ophiuchi	16 27 11.76	8
γ Hydrae	11 15 50.80	5	ζ Herculis	16 34 27.44	7
τ Leonis	11 18 37.43	8	μ 1 Scorpii	16 39 37.83	3
ζ Crateris	11 35 35.78	9	ε Herculis	16 53 21.59	4
Denebola	11 39 49.04	39	η Ophiuchi	17 0 0.22	5
β Virginis	11 41 15.86	2	α Herculis	17 6 23.65	23
γ Ursae maior.	11 44 15.43	10	θ Ophiuchi	17 10 53.91	8
α Corvi	11 59 5.66	14	υ Scorpii	17 18 28.06	4
γ Corvi	12 6 30.46	9	λ Scorpii	17 21 19.57	4

Adscensiones rectae mediae 147 Stellarum
ad initium Anni 1819. reductae.

Nomen Stellae	Adscensio recta media	Num. Observ.	Nomen Stellae	Adscensio recta media	Num. Observ.
α Ophiuchi	17h 26′ 31.″97	18	μ Aquarii	20h 42′ 52.″86	8
β Ophiuchi	17 34 31.82	4	α Cephei	21 14 15.14	6
γ Ophiuchi	17 38 48.91	3	β Aquarii	21 22 1.22	53
μ 1 Sagittarii	18 2 56.39	7	γ Capricor.	21 30 2.80	17
η Serpentis	18 11 56.80	6	ε Pegasi	21 35 17.61	43
λ Sagittarii	18 16 47.94	3	α Aquarii	21 56 28.84	80
Wega	18 30 48.55	26	ϑ Pegasi	22 1 3.86	25
φ Sagittarii	18 34 20.61	5	ϑ Aquarii	22 7 16.35	5
ζ Sagittarii	18 51 5.21	2	γ Aquarii	22 12 18.03	48
δ Aquilae	19 16 22.16	14	ζ Aquarii	22 19 30.35	49
β Cygni	19 23 25.36	17	η Aquarii	22 26 2.99	46
α Sagittae	19 32 0.28	10	ζ Pegasi	22 32 26.13	24
γ Aquilae	19 37 39.10	63	η Pegasi	22 34 31.58	19
Atair	19 41 56.94	69	δ Aquarii	22 45 1.88	39
β Aquilae	19 46 25.12	60	Fomalhaut	22 47 37.51	64
ϑ Antinoi	20 1 57.62	20	β Pegasi	22 55 0.71	7
α 2 Capricor.	20 8 0.14	45	Markab	22 55 44.92	77
β 2 Capricor.	20 10 49.88	39	φ Aquarii	23 4 56.45	31
γ Cygni	20 15 43.94	9	3 ♆ Aquarii	23 9 32.18	5
ε Delphini	20 24 33.88	8	λ Piscium	23 32 48.54	5
β Delphini	20 29 3.60	9	ω Piscium	23 50 1.14	10
α Delphini	20 31 13.67	14	2 g Cete	23 54 27.63	7
Deneb	20 35 15.80	34	α Andromed.	23 59 2.91	69
ε Cygni	20 38 53.38	11			

ADSCENSIONES RECTAE ADPARENTES
SOLIS, ET PLANETARUM
IN SPATIO SUMTAE.

ASCENSIONES RECTÆ APPARENTES

SOLIS, ET PLANETARUM

IN SPATIO SUNTÆ

Adscensiones rectae adparentes Planetarum in spatio sumtae.

Tempus Observationis	Adscens. recta adparens	Tempus Observationis	Adscens. recta adparens	Tempus Observationis	Adscens. recta adparens
SOLIS		SOLIS		SOLIS	
1818 Aug. 2	131° 54′ 32.″8	1818 Oct. 10	195° 13′ 6.″2	1819 Jan. 3	283° 22′ 23.″1
5	134 48 30.8	12	197 3 37.0	4	284 28 26.2
7	136 43 44.6	13	197 59 5.2	17	298 35 42.3
8	137 41 8.7	14	198 54 46.7	18	299 39 48.1
10	139 35 23.6	16	200 46 16.6	21	302 51 2.1
15	144 18 36.2	17	201 42 17.3	22	303 54 23.2
17	146 10 57.2	18	202 38 26.3	25	307 3 24.9
19	148 2 44.2	22	206 24 43.3	26	308 6 1.0
20	148 58 31.0	24	208 18 56.8	28	310 10 31.2
21	149 54 4.6	26	210 13 40.1	29	311 12 31.1
22	150 49 33.0	27	211 11 25.1	30	312 14 14.8
25	153 35 24.6	28	212 9 18.6	31	313 15 44.9
26	154 30 30.6	29	213 7 24.4	Febr. 3	316 19 12.4
28	156 20 26.4	30	214 5 41.8	4	317 19 54.1
30	158 9 55.4	31	215 4 10.0	6	319 20 35.4
Sept. 1	159 59 8.7	Nov. 7	221 59 1.7	9	322 20 16.6
3	161 48 0.0	9	223 59 22.0	10	323 19 40.1
6	164 30 50.0	13	228 2 34.1	11	324 18 57.3
7	165 25 0.2	14	229 3 52.2	12	325 18 1.0
8	166 19 5.0	15	230 5 28.9	14	327 15 42.2
9	167 13 4.4	23	238 25 24.4	16	329 12 31.7
13	170 48 47.6	24	239 28 58.1	Mart. 7	347 11 8.4
14	171 42 40.0	29	244 49 2.2	8	347 51 34.1
15	172 36 27.7	30	245 53 32.6	11	350 52 21.4
16	173 30 21.9	Dec. 1	246 58 15.1	12	351 47 28.2
21	177 59 35.2	17	264 30 57.6	13	352 42 28.8
22	178 53 28.7	18	265 37 31.7	18	357 16 29.4
23	179 47 24.6	21	268 57 20.8	22	0 55 0.6
27	183 23 36.6	23	271 10 44.0	23	1 49 30.6
Oct. 6	191 33 19.2	24	272 17 26.8	24	2 44 4.4
7	192 28 7.7	25	273 24 4.7	26	4 33 5.8
8	193 23 1.3	28	276 44 3.3	27	5 27 34.8
9	194 17 59.2	31	280 3 34.0	29	7 16 37.4

Adscensiones rectae adparentes Planetarum in spatio sumtae.

Tempus Observationis	Adscens. recta adparens	Tempus Observationis	Adscens. recta adparens	Tempus Observationis	Adscens. recta adparens
SOLIS		SOLIS		MERCURII	
1819 Mart. 30	8° 11′ 5.″2	1819 Maii 18	54° 17′ 54.″4	1818 Aug. 5	153° 16′ 36″
31	9 5 37.2	19	55 17 30.9	7	156 18 50
Apr. 2	10 54 42.4	20	56 17 17.3	8	157 46 54
3	11 49 14.9	21	57 17 10.7	10	160 37 14
4	12 43 51.3	22	58 17 14.5	17	169 35 27
5	13 38 30.8	23	59 17 26.2	18	170 45 13
6	14 33 12.4	24	60 17 43.6	25	178 1 54
7	15 27 58.2	25	61 18 9.5	Sept. 1	183 32 22
8	16 22 44.2	26	62 18 44.4	2	184 8 33
9	17 17 30.5	28	64 20 11.5	5	185 36 39
10	18 12 26.0	31	67 23 17.3	8	186 28 43
11	19 7 21.1	Junii 1	68 24 28.5	Oct. 9	178 20 30
12	20 2 25.9	2	69 25 52.2	12	181 38 3
13	20 57 33.2	3	70 27 19.3	13	182 52 46
15	22 47 59.4	4	71 28 51.7	16	186 55 12
17	24 38 45.4	6	73 32 7.3	17	188 20 42
18	25 34 17.4	12	79 43 46.9	18	189 47 40
19	26 29 57.8	13	80 46 0.0	22	195 46 29
20	27 25 41.5	14	81 48 14.7	24	198 49 38
22	29 17 34.6	15	82 50 32.8	27	203 26 30
23	30 13 38.6	16	83 52 51.0	28	204 59 4
25	32 6 15.3	21	89 4 50.4	31	209 37 33
28	34 55 54.3	22	90 7 11.3	Nov. 29	256 10 2
Maii 3	39 41 8.2	24	92 12 1.5	Dec. 25	294 36 7
4	40 53 39.6	26	94 16 45.7	1819 Jan. 21	278 59 38
7	43 31 50.4	27	95 19 5.9	23	279 50 31
8	44 29 52.0	28	96 21 22.2	30	285 38 16
11	47 24 41.9	MERCURII		31	286 43 35
12	48 23 15.9			Feb. 10	299 41 34
13	49 22 4.6	1818 Aug. 3	150 5 49	16	308 35 10
14	50 20 58.4	4	151 42 19	Mart. 7	339 8 10
16	52 19 7.1			8	340 49 10
17	53 18 26.9			10	344 12 44

Adscensiones rectae adparentes Planetarum in spatio sumtae.

Tempus Observationis	Adscens. recta adparens
MERCURII	
1819 Mart. 11	345° 55′ 3″
12	347 38 6
23	7 6 33
24	8 55 2
30	19 36 18
Apr. 8	33 26 23
16	40 59 27
Maii 26	39 7 5
27	39 50 49
28	40 37 54
31	43 19 0
Junii 1	44 19 13
3	46 29 21
4	47 39 11
5	48 52 10
12	58 55 25
15	64 5 17
22	78 10 31
24	82 40 24
25	84 58 54
27	89 41 36
VENERIS	
1818 Aug. 3	168 36 48
5	170 30 37
6	171 34 49
7	172 38 48
8	173 42 36
10	175 49 56
11	176 53 15

Tempus Observationis	Adscens. recta adparens
VENERIS	
1818 Aug. 15	181° 5′ 37″
17	183 11 17
18	184 13 57
21	187 21 59
25	191 31 49
26	192 34 18
28	194 39 9
Sept. 1	198 48 30
2	199 52 6
5	203 0 35
6	204 3 28
7	205 6 26
8	206 9 32
9	207 12 42
15	213 33 41
16	214 37 38
21	219 58 28
22	221 2 56
23	222 7 22
Oct. 16	247 6 13
17	248 10 44
18	249 14 41
22	253 28 40
24	255 33 33
26	257 36 38
27	258 37 31
28	259 37 53
29	260 37 42
Nov. 7	269 3 30
9	270 45 58
12	273 11 4
13	273 57 5
14	274 41 34

Tempus Observationis	Adscens. recta adparens
VENERIS	
1818 Nov. 18	277° 25′ 22″
24	280 40 15
29	282 27 42
30	282 42 21
Dec. 1	282 54 32
23	276 41 57
24	276 3 17
28	273 25 15
31	271 36 29
1819 Jan. 3	269 56 21
4	269 26 38
13	266 43 51
17	266 37 37
18	266 42 26
21	267 10 54
23	267 41 14
28	269 33 10
31	271 2 21
Febr. 1	271 35 18
3	272 46 2
4	273 23 32
6	274 42 51
9	276 51 24
10	277 36 40
14	280 48 34
Mart. 7	300 54 34
8	301 57 19
11	305 7 27
12	306 11 15
13	307 15 27
14	308 19 47
16	310 28 59
18	312 38 52

Adscensiones rectae adparentes Planetarum in spatio sumtae.

Tempus Observationis	Adscens. recta adparens	Tempus Observationis	Adscens. recta adparens	Tempus Observationis	Adscens. recta adparens
VENERIS		VENERIS		MARTIS	
1819 Mart. 20	314° 41′ 32″	1819 Maii 18	18° 54′ 50″	1819 Junii 5	25° 13′ 52″
22	316 59 50	19	20 0 53	6	25 55 53
23	318 5 18	20	21 6 59	12	30 8 17
24	319 10 52	21	22 13 15	13	30 50 29
26	321 22 1	23	24 26 18	15	32 14 53
Apr. 1	327 55 52	24	25 33 3	16	32 57 49
2	329 1 25	25	26 40 2	22	37 10 46
3	330 7 0	26	27 47 12	24	38 35 31
4	331 12 33	28	30 1 58	25	39 17 53
5	332 18 2	Junii 1	34 33 57	26	40 0 16
6	333 23 28	3	36 51 21	27	40 42 40
7	334 28 50	4	38 0 21	28	41 25 9
8	335 34 12	5	39 9 36	29	42 7 35
13	341 0 26	6	40 19 10		
15	343 10 39	12	47 21 42	PALLADIS	
16	344 15 42	13	48 33 8		
17	345 20 41	14	49 44 51		
18	346 25 40	15	50 56 49		
19	347 30 34	16	52 9 6	1818 Aug. 31	346 1 2
20	348 35 31	21	58 14 37	Sept. 1	345 50 6
21	349 40 20	22	59 28 31	2	345 38 58
22	350 45 8	24	61 57 16	3	345 27 52
23	351 49 49	25	63 12 1	4	345 16 46
25	353 59 14	26	64 27 6	6	344 54 6
28	357 13 30	28	66 58 2	6	344 42 43
Maii 4	3 41 47	29	68 13 47	7	344 31 25
7	6 53 43			9	344 8 38
8	8 1 5	MARTIS		14	343 12 21
11	11 16 12			15	343 1 12
12	12 21 25			16	342 50 11
13	13 26 44			21	341 56 43
16	16 43 15	1819 Junii 3	23 49 56	26	341 6 40
17	17 48 59	4	24 31 53	Oct. 11	339 9 58

Adscensiones rectae adparentes Planetarum in spatio sumtae.

Tempus Observationis	Adscens. recta adparens
PALLADIS	
1818 Oct. 12	339° 4′ 20″
15	338 49 22
17	338 40 48
22	338 25 17
26	338 18 37
27	338 17 47
28	338 17 19
29	338 17 8
30	338 17 17
Nov. 8	338 33 22
11	338 44 30
13	338 53 21
14	338 58 18
18	339 20 55
23	339 55 36
24	340 3 30
25	340 11 33
29	340 46 34
30	340 55 49
Dec. 10	342 50 37
CERERIS	
1818 Oct. 11	25 49 29
12	25 36 47
13	25 23 56
17	24 31 59
18	24 18 51
24	22 47 23
26	22 21 43
27	22 9 4

Tempus Observationis	Adscens. recta adparens
CERERIS	
1818 Oct. 28	21° 56′ 37″
30	21 31 58
Nov. 8	19 50 15
11	19 20 36
13	19 2 20
14	18 53 28
18	18 17 45
23	17 49 4
24	17 43 33
25	17 38 28
29	17 21 22
Dec. 21	17 27 49
24	17 41 14
25	17 47 17
28	18 3 32
29	18 9 48
30	18 16 29
1819 Jan. 1	18 30 34
3	18 45 54
4	18 54 0
6	19 10 54
13	20 18 10
22	22 2 1
JOVIS	
1818 Sept. 13	273 45 40
14	273 48 37
15	273 51 48
16	273 55 9
21	274 14 53

Tempus Observationis	Adscens. recta adparens
JOVIS	
1818 Sept. 22	274° 19′ 17″
25	274 34 8
1819 Apr. 12	315 23 36
13	315 32 38
15	315 50 17
16	315 58 54
20	316 32 2
22	316 47 52
Maii 11	318 47 34
12	318 52 15
13	318 56 51
17	319 13 13
18	319 16 51
19	319 20 20
20	319 23 41
21	319 26 45
23	319 32 29
25	319 37 26
28	319 43 26
30	319 46 43
Junii 1	319 49 0
3	319 50 40
4	319 51 14
5	319 51 32
8	319 51 32
SATURNI	
1818 Aug. 28	347 40 50
30	347 32 27
31	347 28 19

Adscensiones rectae adparentes Planetarum in spatio sumtae.

Tempus Observationis	Adscens. recta adparens	Tempus Observationis	Adscens. recta adparens	Tempus Observationis	Adscens. recta adparens
SATURNI		SATURNI		SATURNI	
1818 Sept. 1	347° 24′ 13″	1818 Nov. 11	343° 46′ 14″	1819 Junii 6	0° 30′ 50″
2	347 20 0	13	343 45 34	13	0 52 19
3	347 15 46	14	343 45 19	14	0 55 2
4	347 11 37	18	343 45 40	15	0 57 41
6	347 3 10	23	343 48 7	16	1 0 24
7	346 58 54	24	343 48 50	28	1 24 13
8	346 54 37	25	343 49 44	29	1 25 45
9	346 46 7	29	343 54 22		
14	346 25 1	30	343 55 43		
15	346 20 52	Dec. 31	345 24 2	URANI	
16	346 16 41	1819 Jan. 3	345 36 49		
21	345 56 2	4	345 41 13		
22	345 51 57	Maii 17	359 9 47	1819 Junii 13	261 55 42
24	345 43 49	20	359 23 38	14	261 53 2
26	345 36 3	21	359 28 7	14	261 50 23
Oct. 5	345 2 47	Junii 3	0 20 35	15	261 47 47
Nov. 8	343 47 53	4	0 24 1		

Adscensiones rectae adparentes Planetarum in spatio sumtae.

Tempus Observationis	Limbus Observatus	Adscens. recta adparens	Tempus Observationis	Limbus Observatus	Adscens. recta adparens
	L U N A E				
1818 Aug. 6	Limb. Orien.	185° 42′ 40″	1818 Nov. 8	Limb. Occ.	359° 31′ 36″
7	Occ.	197 56 5	1819 Jan. 3	Occ.	15 22 13
8	Occ.	210 42 43	4	Occ.	27 7 39
9	Occ.	224 22 52	6	Occ.	51 26 58
18	Or.	350 11 14	19	Or.	201 25 29
22	Or.	38 25 42	23	Or.	263 39 3
25	Or.	76 44 35	30	Occ.	10 16 54
Sept. 5	Occ.	220 7 51	31	Occ.	22 24 54
6	Occ.	234 32 27	Febr. 1	Occ.	34 33 19
9	Occ.	283 14 9	2	Occ.	46 58 5
10	Occ.	299 46 27	3	Occ.	59 48 33
15	Or.	356 54 19	6	Occ.	100 40 44
16	Or.	9 5 52	Mart. 7	Occ.	122 47 29
22	Or.	85 4 40	Maii 3	Occ.	150 6 33
23	Or.	98 42 8	4	Occ.	161 53 24
Oc . 10	Occ.	358 40 19	15	Or.	307 10 46
11	Occ.	351 23 45	16	Or.	322 21 20
12	Occ.	3 33 14	19	Or.	1 42 19
22	Or.	120 31 15	20	Or.	13 48 49
24	Or.	146 33 29	Jun. 1	Occ.	168 29 19
Nov. 7	Occ.	347 25 26			

Occultationes Stellarum per lunam, Solis item, et Lunae eclipses.

Dies Observationis	Nomen Stellae	Tempus Siderale Immersionis				Tempus Siderale Emersionis			
1815 Mart. 20	δ Geminor.	0^h	11′	13.″5	bona	1^h	4′	40.″0	bona
1816 Sept. 10	ξ Arietis	22	52	36.2	bona	0	7	26.3	bona
Nov. 19	☉	13	24	8.5		15	57	30.5	
Dec. 6	ε Geminor.	23	44	22.2	bona	0	39	13.2	bona
1817 Mart. 29	η Leonis	8	57	0.9	bona	9	55	55.9	
Apr. 6	* Serpentar.	16	29	57.1	dub.	17	46	18.1	dub.
6	26 Serpentar.	16	38	23.1	dub.	17	43	38.1	bona
Sept. 27	μ. Piscium	—	—	—		0	52	26.2	bona
Dec. 27	η Leonis	6	10	56.7	bona	7	16	3.7	bona
31	γ Virginis	11	8	18.4	bona	12	8	31.4	bona
1818 Apr. 21	☾	14	20	39.0		16	40	2.0	
Dec. 27	ϑ Virginis	8	17	42.8	bona	—	—	—	
1819 Maii 20	Mars	1	52	31.9	bona	2	15	28.9	dub.
1820 Sept. 7	☉	—	—	—		15	55	56.6	

Observationes meteorologicae

Mensis	Status med. Barometri	Thermom. Inter.	Thermom. Exter.	Max. Thermom.	Ventus domin.	Pluvia	Nix	Nebula	Dies Nubili
ANNO 1811.									
Januarius	27p 7l 646	— 2°1	— 3°4	— 8°9	NWgW	2	9	6	23
Februarius	5. 983	— 0. 8	— 0. 9	— 7. 0	OgN	3	1	9	9
Martius	8. 424	+ 5. 9	+ 5. 1	+11. 5	WNW	1	1	0	4
Aprilis	5. 840	+ 8. 7	+ 8. 7	+18. 0	SO	7	1	3	9
Maius	7. 226	+16. 5	+16. 2	+24. 0	SW	3	0	0	2
Junius	7. 727	+20. 8	+19. 3	+26. 4	SW	4	0	0	3
Julius	7. 190	+20. 2	+19. 3	+26. 8	NW	2	0	0	6
Augustus	7. 394	+18. 9	+18. 1	+26. 7	NWgW	4	0	0	3
Septemb.	7. 988	+15. 9	+13. 4	+22. 5	NWgW	5	0	0	8
October	7. 184	+12. 9	+11. 5	+17. 3	SSW	6	0	5	1
Novemb.	7. 722	+ 6. 1	+ 3. 9	+12. 8	NW	6	0	9	8
December.	5. 604	+ 1. 4	+ 0. 2	— 4. 0	NWgW	4	2	12	12
Ann. tot.	27 7. 160	+10. 4	+ 9. 3		NWgW	47	14	44	88
ANNO 1812.									
Januarius	27 6. 048	— 2. 5	— 4. 0	— 9. 9	SO	2	2	5	14
Februarius	6. 305	+ 1. 2	+ 1. 0	— 7. 6	NW	6	1	2	11
Martius	4. 003	+ 5. 0	+ 4. 8	+13. 8	SO	13	5	5	15
Aprilis	5. 344	+ 6. 5	+ 5. 8	+15. 5	NW	7	4	2	11
Maius	6. 737	+14. 4	+13. 6	+20. 2	SgO	6	0	2	4
Junius	7. 632	+17. 3	+16. 5	+25. 0	WEST	6	0	1	3
Julius	7. 143	+17. 7	+17. 0	+24. 0	WgN	15	0	0	5
Augustus	6. 875	+16. 9	+16. 9	+21. 8	NWgW	10	0	0	3
Septemb.	8. 370	+12. 6	+11. 6	+18. 5	NWgW	7	0	1	7
October	4. 867	+11. 9	+11. 0	+17. 9	SW	9	0	1	9
Novemb.	6. 118	+ 4. 7	+ 3. 4	+ 8. 7	NW	10	1	12	10
Decemb.	6. 360	— 2. 4	— 3. 8	—16. 5	OgN	0	13	5	14
Ann. tot.	27 6. 317	+ 8. 6	+ 7. 8		SO	91	26	36	106

Observationes meteorologicae

Mensis	Status med. Barometri	Thermom. Inter.	Thermom. Exter.	Max. Thermom.	Ventus domin.	Pluvia	Nix	Nebula	Dies Nubili
ANNO 1813.									
Januarius	27p 8l.752	— 3°.4	— 4°.7	—13°.7	NNO	2	8	12	12
Februar.	7.929	+ 0.6	+ 0.8	—12.0	WNW	0	5	9	5
Martius	7.938	+ 3.9	+ 3.4	+10.9	NO	3	5	1	2
Aprilis	7.357	+11.0	+10.6	+18.0	SgW	5	1	3	6
Maius	7.130	+15.0	+14.2	+19.0	NO	11	0	1	4
Junius	6.611	+15.1	+14.3	+21.5	WSW	13	0	1	6
Julius	5.875	+16.6	+16.1	+21.3	NWgW	13	0	2	2
Augustus	6.806	+16.4	+15.4	+22.6	NWgW	12	0	0	6
Septemb.	8.045	+13.0	+11.9	+18.3	WgN	9	0	3	5
October	6.222	+10.5	+ 9.4	+14.2	WEST	11	0	4	4
Novemb.	6.303	+ 5.5	+ 4.2	+ 8.8	NgW	8	3	10	15
Decemb.	6.347	+ 3.3	+ 2.6	+ 8.0	SUD	3	2	11	11
Ann. tot.	27 7.110	+ 8.9	+ 9.0		NWgW	90	24	57	78
ANNO 1814.									
Januarius	27 3.492	— 0.5	— 1.2	— 9.3	WSW	8	7	3	12
Februar.	7.131	— 1.6	— 3.1	—12.4	NW	1	8	1	6
Martius	5.156	+ 5.0	+ 5.1	+11.2	SW	6	2	5	10
Aprilis	7.155	+11.3	+10.3	+16.2	SO	6	1	2	7
Maius	6.350	+10.9	+10.8	+18.5	SW	10	1	2	8
Junius	7.145	+14.9	+14.5	+19.8	WEST	16	0	0	6
Julius	7.162	+17.6	+18.5	+24.3	NWgW	13	0	0	6
Augustus	7.740	+17.8	+16.4	+22.8	NW	11	0	1	4
Septemb.	7.727	+11.7	+10.9	+18.6	SUD	10	0	3	6
October	7.132	+ 9.3	+ 8.3	+14.3	SOgO	7	0	7	6
Novemb.	6.970	+ 4.2	+ 3.4	+ 7.5	SgW	8	1	10	12
Decemb.	5.975	+ 3.4	+ 2.7	+10.6	SgW	7	7	5	15
Ann. tot.	27 6.592	+ 8.7	+ 8.1		SgW	103	27	39	97

Observationes meteorologicae

Mensis	Status med. Barometri	Thermom. Inter.	Thermom. Exter.	Max. Thermom.	Ventus domin.	Pluvia	Nix	Nebula	Dies Nubili
			ANNO 1815.						
Januarius	27P 5l 023	— 1°4	— 1°9	— 6°6	OgS	4	13	4	18
Februar.	7.520	+ 1.8	+ 2.1	+ 8.6	NWgN	3	2	9	14
Martius	6.804	+ 5.2	+ 5.0	+15.4	WNW	7	4	2	4
Aprilis	6.173	+ 9.6	+ 8.9	+15.3	NW	10	1	0	7
Maius	6.746	+14.2	+13.6	+20.2	NW	13	0	0	0
Junius	5.964	+16.2	+15.9	+23.7	NW	17	0	1	4
Julius	6.597	— —	+16.3	+22.5	SW	7	0	0	3
Augustus	7.174	+15.8	+15.4	+19.8	NW	11	0	3	2
Septemb.	7.940	+12.5	+11.9	+18.9	NWgW	10	0	4	5
October	8.270	+ 9.5	+ 9.1	+13.5	SW	9	0	5	12
Novemb.	7.215	+ 4.2	+ 3.5	+ 9.0	WgN	10	3	11	15
Decemb.	7.215	— 1.6	— 2.1	— 8.7	WgN	4	10	13	18
Ann. tot.	27 6.887	+ 7.8	+ 8.2		NW	105	33	52	102
			ANNO 1816.						
Januarius	27 5.734	+ 0.3	+ 0.5	— 6.5	SSW	9	7	15	14
Februar.	5.207	— 0.6	— 1.0	— 7.4	NWgW	5	5	6	9
Martius	4.859	+ 4.3	+ 4.1	+10.7	SW	8	5	5	14
Aprilis	5.330	+ 8.4	+ 8.4	+15.6	NO	11	2	3	6
Maius	5.493	+12.3	+12.4	+18.8	NW	14	0	1	3
Junius	5.044	+16.0	+15.4	+21.4	SW	22	0	1	7
Julius	5.532	+15.7	+15.4	+21.7	SWgW	12	0	3	3
Augustus	6.773	+15.9	+15.0	+24.4	NWgW	10	0	5	4
Septemb.	7.530	+13.5	+12.4	+18.5	WgN	11	0	1	7
October	6.922	+ 8.4	+ 7.8	+14.7	NWgW	11	0	3	10
Novemb.	6.403	+ 5.2	+ 4.5	+12.3	SW	8	3	10	10
Decemb.	6.871	— 0.7	— 1.0	— 7.0	SW	3	7	9	13
Ann. tot.	27 5.975	+ 8.2	+ 7.8		SW	124	29	65	100

Observationes meteorologicae

Mensis	Status med. Barometri	Thermom. Inter.	Thermom. Exter.	Max. Thermom.	Ventus domin.	Pluvia	Nix	Nebula	Dies Nubili
ANNO 1817.									
Januarius	27p 7l 648	+ 0°5	+ 0°5	+ 6°6	SW	5	6	13	10
Februar.	5.713	+ 3.3	+ 3.3	+ 7.9	NWgW	10	5	0	7
Martius	4.681	+ 4.3	+ 4.5	+12.0	NWgW	15	8	2	7
Aprilis	6.371	+ 5.1	+ 4.8	+13.6	NgO	9	8	2	7
Maius	5.337	+11.5	+13.5	+21.0	SW	6	0	2	3
Junius	7.308	+16.3	+16.6	+21.9	OST	5	0	0	2
Julius	6.915	+16.7	+16.0	+24.2	NO	6	0	0	4
Augustus	7.283	+17.1	+16.0	+22.8	NORD	3	0	2	2
Septemb.	8.312	+15.6	+13.9	+20.5	OST	4	0	2	2
October	6.757	+ 9.8	+ 6.9	+16.8	NgO	18	0	8	18
Novemb.	8.920	+ 7.6	+ 4.4	+ 9.6	WNW	6	1	7	8
Decemb.	3.848	+ 5.8	+ 1.1	— 7.7	WEST	11	11	6	17
Ann. tot.	27 6.591	+ 9.5	+ 8.5		NWgW	98	39	44	87
ANNO 1818.									
Januarius	27 5.697	+ 4.0	— 0.4	— 7.3	NWgW	2	12	10	18
Februar.	4.419	+ 5.4	+ 0.7	+ 7.0	NO	5	3	6	5
Martius	3.151	+ 8.5	+ 5.6	+13.5	SW	8	4	1	6
Aprilis	3.524	+ 9.9	+ 9.7	+22.0	SW	5	2	4	3
Maius	4.031	+12.6	+12.6	+22.7	SUD	11	0	1	8
Junius	5.368	+14.4	+15.5	+24.0	NORD	4	0	0	1
Julius	4.972	+16.1	+16.8	+24.0	WEST	7	0	0	3
Augustus	5.033	+16.1	+15.4	+25.2	NORD	13	0	2	3
Septemb.	4.842	+14.2	+13.1	+22.0	NWgW	13	0	3	10
October	6.120	+10.9	+ 8.6	+16.0	NgO	10	0	11	7
Novemb.	6.111	+ 5.3	+ 3.4	+10.3	NgO	4	1	10	13
Decemb.	6.911	+ 1.0	— 2.1	— 9.0	NWgW	1	5	9	17
Ann. tot.	27 5.015	+ 9.9	+ 8.2		NWgW	83	27	57	94

Observationes meteorologicae

Mensis	Status med. Barometri	Thermom. Inter.	Thermom. Exter.	Max. Thermom.	Ventus domin.	Pluvia	Nix	Nebula	Dies Nubili
ANNO 1819.									
Januarius	27P 5l 977	— 0°4	— 2°7	— 7°3	NgW	1	5	11	11
Februar.	2.940	+ 1.4	+ 0.2	+ 4.2	NWgW	6	12	5	15
Martius	3.402	+ 4.8	+ 4.3	+12.2	NWgW	6	2	2	13
Aprilis	4.128	+ 9.4	+ 8.3	+18.0	SUD	7	1	0	7
Maius	4.258	+11.5	+11.1	+18.3	OST	7	0	3	4
Junius	4.667	+15.7	+14.9	+21.2	NORD	10	0	1	2
Julius	4.609	+15.5	+16.7	+27.5	NWgW	12	0	0	2
Augustus	4.376	+15.9	+15.9	+22.7	NWgW	12	0	0	4
Septemb.	5.832	+14.8	+13.4	+19.2	OgN	6	0	1	5
October	4.713	+11.5	+ 8.6	+15.3	SUD	10	0	9	7
Novemb.	3.542	+11.1	+ 4.8	+10.2	NWgW	9	5	14	15
Decemb.	4.667	+ 7.3	— 0.6	— 5.7	OgS	4	10	15	20
Ann. tot.	27 4.426	+ 9.9	+ 7.9		NWgW	90	35	61	105
ANNO 1820.									
Januarius	27 5.011	+ 6.1	— 4.1	—12.8	NW	5	6	3	10
Februar.	6.949	+ 7.8	— 0.2	— 6.0	OST	3	2	5	10
Martius	2.924	+ 9.2	+ 2.6	+11.0	NWgW	7	8	7	12
Aprilis	4.668	+12.8	+ 9.5	+16.5	OgS	7	0	2	4
Maius	4.834	+13.3	+13.9	+20.5	SUD	12	0	0	4
Junius	4.356	+13.5	+14.0	+19.2	NWgW	11	0	1	2
Julius	4.417	+15.1	+15.7	+22.0	NWgW	8	0	1	2
Augustus	5.597	+17.4	+19.2	+26.0	SgW	3	0	0	1
Septemb.	5.199	+14.3	+11.8	+22.0	NWgW	9	0	1	8
October	4.026	+12.1	+ 8.2	+14.3	SgO	9	0	7	8
Novemb.	4.654	+12.6	+ 3.9	+11.0	NWgW	8	1	9	15
Decemb.	5.738	+11.5	— 1.7	— 8.5	NW	3	6	6	18
Ann. tot.	27 4.864	+12.1	+ 7.7		NWgW	85	23	42	94