

Terms and Conditions

The Library provides access to digitized documents strictly for noncommercial educational, research and private purposes and makes no warranty with regard to their use for other purposes. Some of our collections are protected by copyright. Publication and/or broadcast in any form (including electronic) requires prior written permission from the Library.

Each copy of any part of this document must contain there Terms and Conditions. With the usage of the library's online system to access or download a digitized document you accept there Terms and Conditions.

Reproductions of material on the web site may not be made for or donated to other repositories, nor may be further reproduced without written permission from the Library

For reproduction requests and permissions, please contact us. If citing materials, please give proper attribution of the source.

Imprint:

Director: Mag. Renate Plöchl

Deputy director: Mag. Julian Sagmeister

Owner of medium: Oberösterreichische Landesbibliothek

Publisher: Oberösterreichische Landesbibliothek, 4021 Linz, Schillerplatz 2

Contact:

Email: [landesbibliothek\(at\)ooe.gv.at](mailto:landesbibliothek(at)ooe.gv.at)

Telephone: +43(732) 7720-53100

& Anguli orientis, conjunctorum, multò sanè concinnius: ut in qua conjunctione conformitas aliqua est cum Tab. Asc. rectæ, declinationis & Angg. Ecl. cum Merid: simul & arcuum contrapositionum Ascensiones junctæ implent circulum. Poterit hæc conjunctio, si quando recedentur Tabulæ primi motus, continuari per omnes gradus Alt. Poli; poterit interseri & Amplitudo ortiva, vice Declinationum: poterunt deniq; anguli ipsi in areis, numeris exprimi usitatis scrupulosius, ut illos habeo computatos in chartis: in hoc opere sufficere visa est forma hæc qualiscunque, compendio servitura.

PRÆCEPTUM 39.

EXCERPTIO facilis est: Datum Eclipticæ punctum oriens quæritur in alterutro marginum, altitudo Poli vel in fronte vel in calce promiscuè, & ex area communis concursus excipitur gradus cum Notâ appendice, quæ per Tabellam folio anteced. positam, convertitur in Scrupula; attento, cui notæ vicinæ, nota in venta magis appropinquet, ut numerus scrupulorum unitate vel binario secundum talem appropinquationem vel augeatur vel minuat.

PRÆCEPTUM 40.

QUOD si placet experiri fidem Tabulæ, & angulum hunc accuratè computare; primum ex Tab. Asc. rectarum per datum Eclipticæ punctum oriens, excerpe Angulum, & Declinationem ascriptam: hujus verò Antilogarithmum aufer à Log. alt. Poli; restabit Log. anguli, subtrahendi ab excerpto, ut remaneat Angulus orientis.

Ut, quia puncti $0^{\circ}.7'.12''$ \propto orientis Angulus est $69^{\circ}.15'.15''$, Declinatio $11^{\circ}.28'.10''$; hujus Antilogarithmus 2017 auferatur ab Alt. P. 39° . Logarithmo 48506, restabit 46489. Logarithmus arcus $38^{\circ}.55'.5''$, qui subtrahitur ab excerpto, relinquit $30^{\circ}.24'.10''$ Angulum Orientis. Tabula sub alt. P. 38. ad \propto ostendit, 30° cum Nota N, quæ valet 25', ergo punctum ultra \propto habebit minus quam $30^{\circ}.25'$, quia 1 \propto habet $30^{\circ}.0'$.

PRÆCEPTUM 41.

SI verò detur non ipsum punctum Eclipticæ oriens, sed ejus asc. obliqua, & nihilominus quærat de angulo orientis ignoti puncti: in hoc casu abutere arcu Æquatoris dato, ac si esset arcus Eclipticæ, convertens eum in signa & gradus; quib. in margine Tab. Asc. rectarum quæsitis excerpe veluti Declinationem & Angulum: Huic angulo in primo quidem & quarto arcu Æquatoris adde altitudinem Æquatoris, in secundo & tertio adime: compositi vel residui Logarithmo adde Antilogarithmum excerptæ Declinationis vel quasi, conficietur Antilogarithmus anguli orientis.

Ut si sub alt. Poli 38° . Sit data asc. obliqua $341^{\circ}.20'.29''$. hæc conversa in signa, ac si esset arcus Eclipticæ, dat $11^{\circ}.20'.29''$, \propto qui in margine Tab. Asc. quæsitus habet declinationem $7^{\circ}.20'.11''$, angulum $67^{\circ}.34'.54''$; Huic adde alt. 29.52 , quia in quarto quadrante Æquatoris sumus: fit compositus $119^{\circ}.34'.54''$. cujus Logarithmo 13967. adde Antilogarithmum declinationis 822; fit summa 14789, qui ut Antilogarithmus, ostendit $30^{\circ}.24'$ Angulum Orientis.

Exceptio,

Hæc præcepta suas patiuntur exceptiones

in Zona Frigidâ, quas calculator curiosus, adhibita Sphæra, facile suo Marte deprehendet.

PRÆCEPTUM 42.

ALIA faciliore via: pro puncto Æquator. oriente, sume cælum medians, seu Asc. R, MC. subtractis 90° ab Asc. obliquâ datâ: & ei inter Asc. rectas quæsitæ adscriptam declinationem angulumque excerpe: ablatâ verò Declinatione sept. ab altitudine Poli; vel additâ meridionali, residui vel compositi Logarithmo adde Logarithmum Anguli excerpti: fiet Antilogarithmus anguli orientis quæsit.

Ut quia datur Asc. Obl. $341^{\circ}.20'.29''$, sumatur A.R., M.C. $251^{\circ}.20'.29''$. (ablatis 90°) Huic A.R. in Tabula adscriptus est Angulus $82^{\circ}.39'.43''$ Declinatio $22^{\circ}.24'.52''$ Meridiana, quia A.R. superat semicirculum: igitur additâ alt. Poli: fit $60^{\circ}.24'.52''$, Hujus Logarithmo 13971 additur Logarithmus Anguli 822. facit 14793. Antilogarithmum eundem, quem prius arcus sc. $30^{\circ}.24'$.

Usus Anguli Orientis.

Jam quod atinet usum Anguli hujus orientis primarium in his Tabulis; de eo agam infra in doctrina Parallaxium. Nunc videamus, quomodo is defectum suppleat omissarum Tab. Asc. Obliquarum.

DATO PUNCTO ECLIPTICÆ ORIENTE, PER EIUS CUM HORIZONTE constitutum angulum indagare Asc. obliquam.

PUNCTO quod est ab oriente Nonagesimum, seu Quadrante circuli distans, abutere tanquam puncto Æquatoris, conversis signis in tempora, iisq; quæsitis inter Ascensiones rectas Tabulæ, excipere Declinationem & Arcum Eclipticæ ex limbis & margine respondentem: quod si septentrionalis fuerit declatio, aufer eam ab Angulo Orientis, si meridiana adde: à residui vel compositi arcus Logarithmo aufer Logarithmum altit: Æquatoris; restabit Log. arcus Æquatoris. ortivi quidem, si Nonagesimus est in Orientali Quadrante, occidui verò, si in occidentali. Ille igitur ortivus additus ad excerptum velut Eclipticæ arcum, conversum prius iterum in Tempora, constituit Asc. obliquam: Iste verò occidui ablati, constituit Descensionem obliquam.

PRÆCEPTUM 43.

Ut si detur punctum oriens $0^{\circ}.7'.12''$ \propto ejusque Angulus $30^{\circ}.24'$. sub Alt. Poli 38° . & sit quærenda Asc. obliqua. Erit igitur Nonagesimus ab ortu $0^{\circ}.7'.12''$ \propto : qui velut in Æquatoris Tempora conversus, fit $240^{\circ}.7'.12''$, quibus inter asc. rectas quæsitis, excerpitur ex frontibus & margine $2^{\circ}.13'.12''$, \propto : & hic Eclipticæ arcus in Æquatore rursus extensus fit $242^{\circ}.13'.12''$. Declinatio verò per eundem illi arcum excerpitur $20^{\circ}.40'.46''$ Meridiana; Huic adde angulum orientis $30^{\circ}.14'$. fit $51^{\circ}.4'.46''$. A cujus Logarithmo 25101. ablati alt. Æquatoris 52° . Logarithmus 23824. relinquit 1277 Logarithmum arcus Æquatoris $80^{\circ}.51'.48''$ occidui, quia Nonagesimus est in quadrante Occidentali, quippe cum sit in semicirculo descendenti. Hic igitur ablati à $242^{\circ}.13'.12''$. excerpto, relinquit Desc. obliquam $161^{\circ}.20'.24''$. & addito semicirculo, fit Asc. obliqua $341^{\circ}.20'.24''$.

Vt fol. 28. Tab. in calce.

Alia.