Equatorium planetar.

Ostante ptholomeo m̄su
o ventilequio ꝓ libro qñ
to astronomi multu ma
lit ꝓhibē posse id quod
z̄m stellas venturu est
si eius naturam cognouit & qua
cognito stellaꝝ sine cognitione veꝝ
ꝫ loꝝ eazdem hꝫi nō ꝑt. ꝯ
tio tempono equatoriu planetaꝝ
ꝑ qđ faalit' muemant' equatores
ꝛ vera loca eaꝝ sine tabulis et
sine calculatone mūi laboriosa.

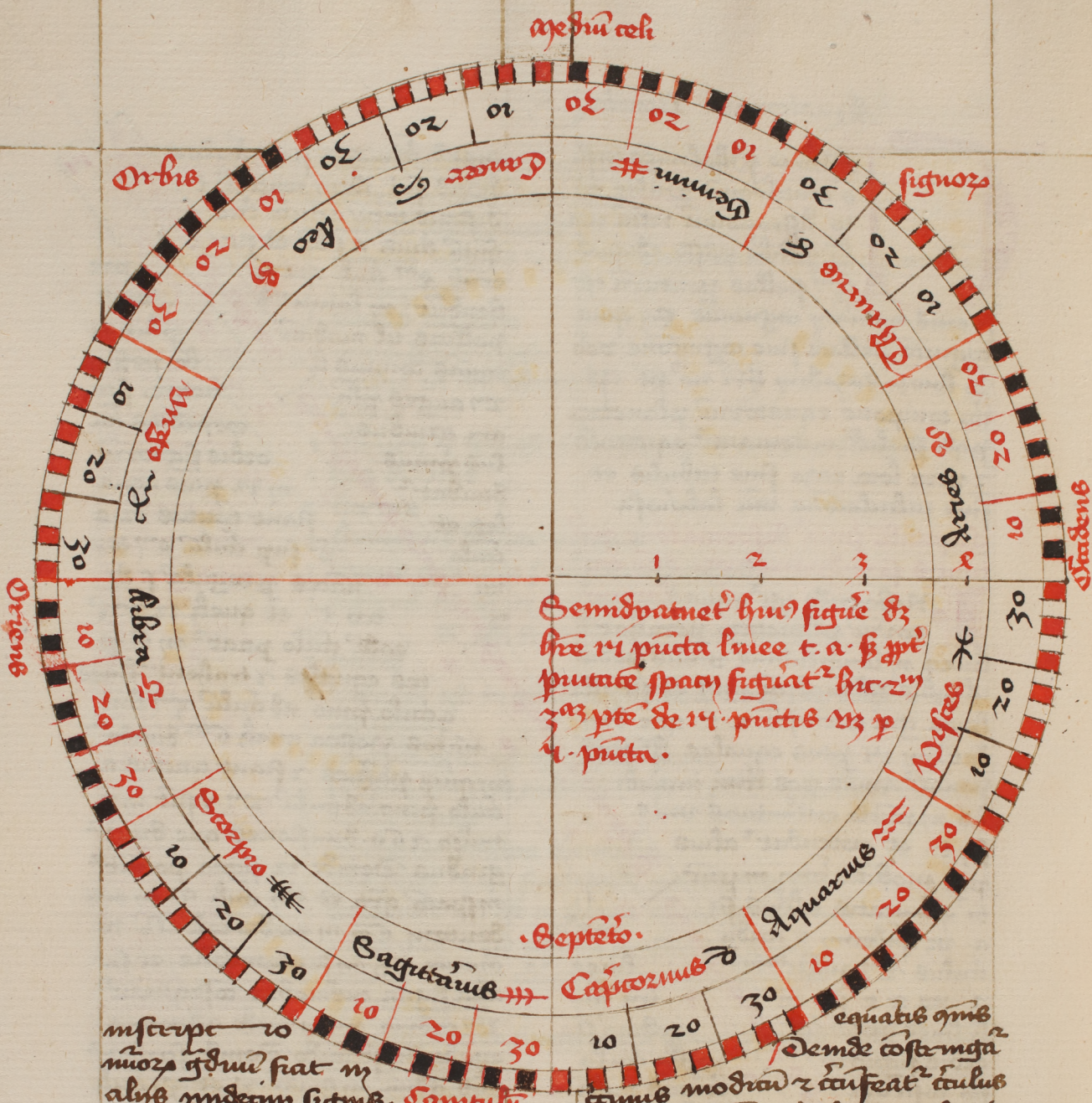
Capitulū ꝑmū de formatone qua
titatis secundy planetaꝝ & om̄ tru

Inchoando igit' equa torium planetaꝝ ꝓtrahat' linea m̄ longitudine vnius pedis
uel plus uel modicū mi9 & sit illa
linea gra exempli .a.t. que diui
dat' m̄ 14. ptes equales & sco
ponat' vnus pes t̄mi immobi
lis in puncto estimtatis vni9
sc̄z .t. et extendat' alius
pes mobilis t̄mi in punc
tu estimtatis altius sc̄z
a. vz quidem ꝛ t̄rudu
t̄culus z̄m quatr̄tem
a .vta ꝑ t. sit ce
li linee exteriꝰ
orbis signoꝝ
sco costringa'
cu ꝛ t̄rise
distans
calami
tru
sti
d

mat'. t̄mus ꝛ fiat t̄culus
ꝑtus sit idem centru t
distans tatu a t̄culo tro
qntū t̄cus a sco & sic
erit q'or t̄culi qui to
hendut' m̄ latitudine
pollicis uel modicū
equalis communis li
z̄m augmentes pla
netarū t̄rubus
lus ꝑmus
diuidat'
les et
t̄culo
mi
re

Augmentatio prima
Augmentatio secunda
Augmentatio tertia
Augmentatio quarta
Augmentatio quinta
Augmentatio sexta
Augmentatio septima
Augmentatio octava
Augmentatio nona
Augmentatio decima
Augmentatio vndecima
Augmentatio duodecima

pre
vni9
plus ut
be possit
netaꝝ situ
expedius tu
orbis signoꝝ
m̄ vz ptes equa
fiant tractus vz. a
p'o sup t̄culū q'm ter
nates p regula s. de
tro t. et quelz vz ma
eode t̄culo ꝓtrah' m̄ 6. p
tes equales ꝛ trahent' linee
a t̄culo ꝑmo ad t̄culū z̄m t̄mi
nates postea quelz 6ta diuida'
m̄ quīq ptones ꝛ fiant tractus a
t̄culo ꝑmo ad t̄culū z̄m ꝛ sut m̄ vz
mūso z 60. diuisiones que dicunt'
gradus deinde vz signa ponit'
m̄ spacio q̄rta et t̄tij t̄culi & m̄ occa
dentem ♋ in medio celi ♎ m̄
oriente ♑ m̄ septemtrione / et sic
alia signa m̄mēdra cosequent'
z̄m ordine m̄cipiendo a dextris
eundo sinistrando deinde scribat'
mūb gr̄dus m̄ spacio z̄i et z̄m t̄culi
m̄cipiendo a p̄ncipio tu9 signi
mtase vz m̄ spacio 4. gr̄dus sc̄ben'
4. et m̄ spacio 10. gr̄dus loren'. 10.
et m̄ spacio 14 gr̄dus sc̄iuant' 14
et m̄ spacio 20 gr̄dus sc̄iuent' 20
et m̄ spacio 24 gr̄dus ponat' mūb
24 et postremo m̄ spacio 30 gr̄dus
mūb 30. p que t̄mat' sc̄iuē ut pa
tebit m̄ figura & similis diuisio et



mscripc 10
nuoz gdui fiat m
alijs vndecim signis. Capitulu

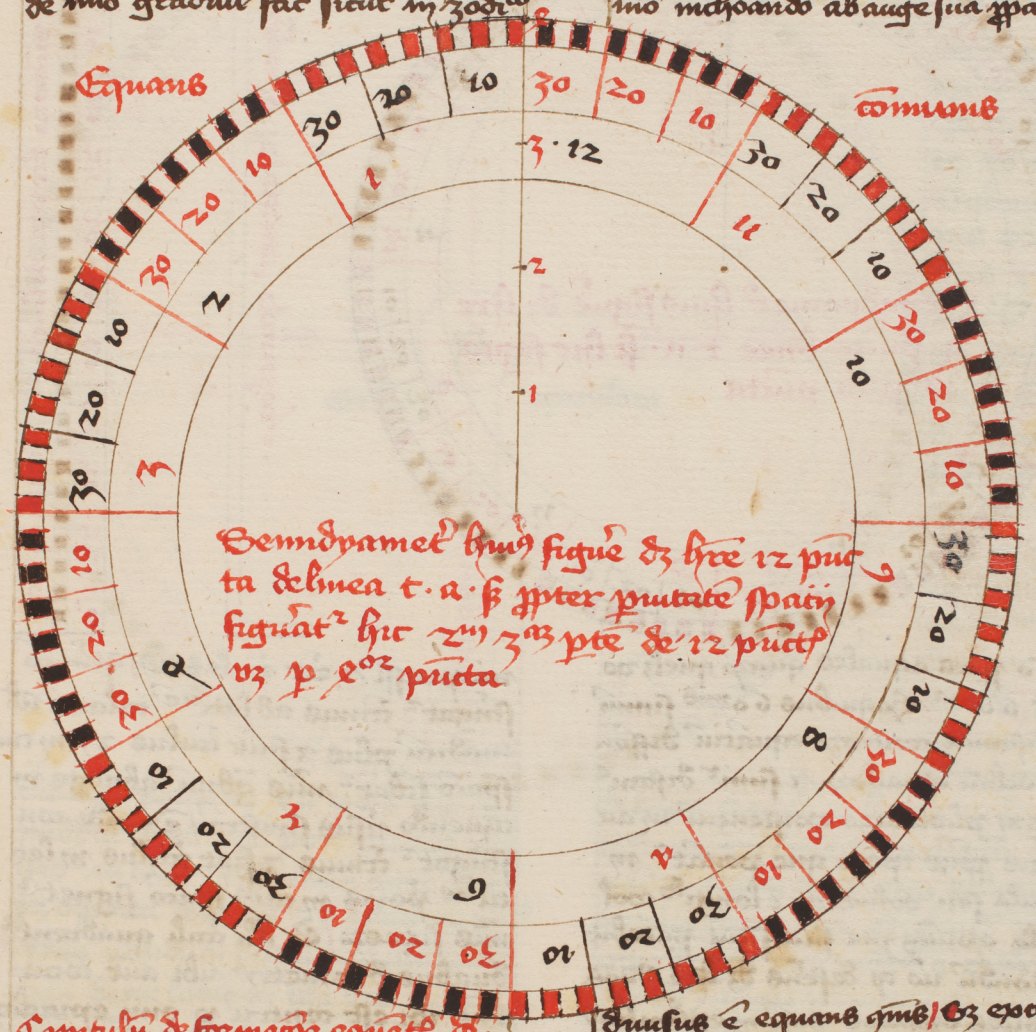
Reformatcone equanciu

Consequet in formatcone eqc
ciu primo formc equas gnis
talit ponat vnus pes cimi immo
bilis in puncto t/ et alius pes cimi
mobilis in 12m puctu linee pdce
a t/ et circundua linea 12m cpate
12 puctoz sup centrum t/ et he
bis extremis cuspenda circuli

equatis gnis
Deinde costrngt
cimus modrat z causeat circulus
zg drstas a primo in latne calami
pssi sup idem centrum/ dem fiat
3g/ post. q tus ut in orbe signoz
dnz est qui sequens duidat simili
mo sicut patuit in duusione orbis
signoz incipiando ab auge sua p
signe/ dem 2m et sic cosequent
eundo usus sinistrum/ vndu tan
ip in equate gne z in cpte o ☥

et in orbe epicicloz signa dent scribi p nim sz. 1. 2. 3. re et no priora signoz sicut de zodiaco dim est. ℔ de mo gradu sac sicut in zodiaco

culus zi postea 39/ Demde qrtus ut dim est de formacone equantis qnis/ cui equas ☿ imdat. similimo incoando ab auge sua ppa sicut



Capitulu de formacone equatis ☿.

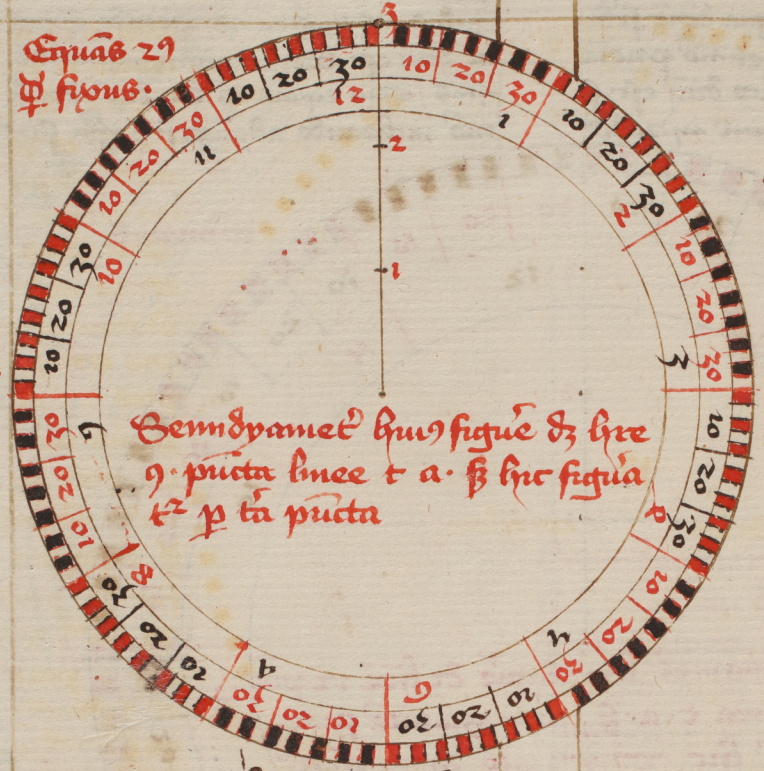
Formato uo equantis zi vide hz ☿ sic hetur ponat zmus pes tam immobilis in puncto t. in linea pscripta a. t. et alius pes ei mobilis in qm punctu z fiat circulus. zm quantitate q. punctoz sup centru t. et sit exterior circulus equatis zi. sz ☿/ postea consideret circulus modum z circumferat

circulus equantis qmis/ 6z excepto q nus signoz z qdrm in equante qm usus sinistrorsum eundo ponitur/ hic in equate zo sz ☿ eundo usus dextrorsum situet. ut patebit in figua.

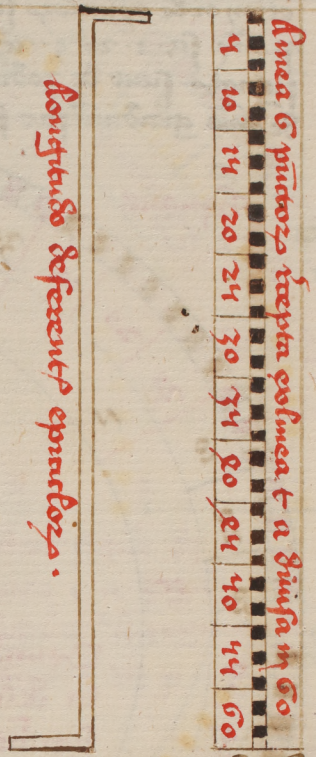
Capitulu de formacone differentis

Abscindat linea equalis 6. punctis de linea t. a. pscripta q sine a abscisa sit semidya differentis orbis epicicloz z ia longitudo imdat.

Equas zł
☿ signis.

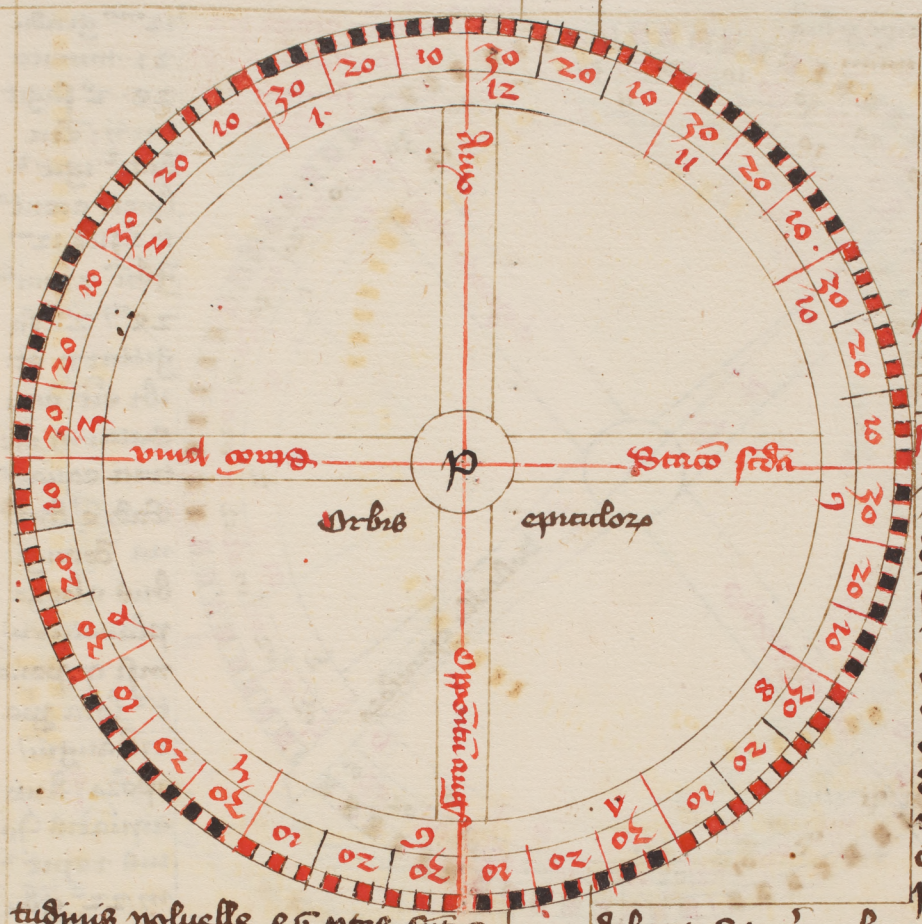


Longitudo deferentis epicicli.



m 60 ptes equales quaz quelz vo
uet2 60ma/ Equbus 60mis simili
t2 distantie centroz equatiu differen
tiu orbiu epicloz t simi2 distan2
torpm planetaz existentiu in au
gibus ꝓpis ipoz que ponat2 in
regula seu voluella t longid vol
uelle equitaz ptes sua siat patebit
Mondu uo qꝙ defens dz lire duos
cuspides opponat vnu in ecentitate
qui intrat punctu centri defentis
t aliu in alia ecentitate qui intrat
centru orbis epicloz ad cuspendu
Deformatone orbis epicloz
Hijs expeditis retinant2 60
ptes de illis 60mis presigna
tis t equaret2 culus in assere teni
et plano/ Demde constringa2 crimus
modicu ad latitudinem medietatis cala

mi pressi t erit culus zł/ Qdm co
stringat2 crimus ad latitudine calami ut
modicu plus t fiat culus zł in cuiꝰ
spacio stet2 nus gdum abauge in
aprendo ipsius sinistra/ Demde con
stringat2 crimus t fiat culus in lati
tudine porris in cuiꝰ spacio signet2
nus signoz/ Et illi culi quadrent2
duabus diametris ubi aut tocat
rut ibi est centru p oim epicloz
Abeodem centro p· ponut2 distan
tie oim corpm planetaz t in qua
tate distantiaz epicloz ut
60mis psiciatis extrahunt2 ut
postea patebit· Deformatone volluella
Fiat voluella in latitudine pui di
giti ut sit in dorso astrolabii
in longitudine vna cotinens 60· ptes
de 60mis qut dim est· t huiꝰ longi

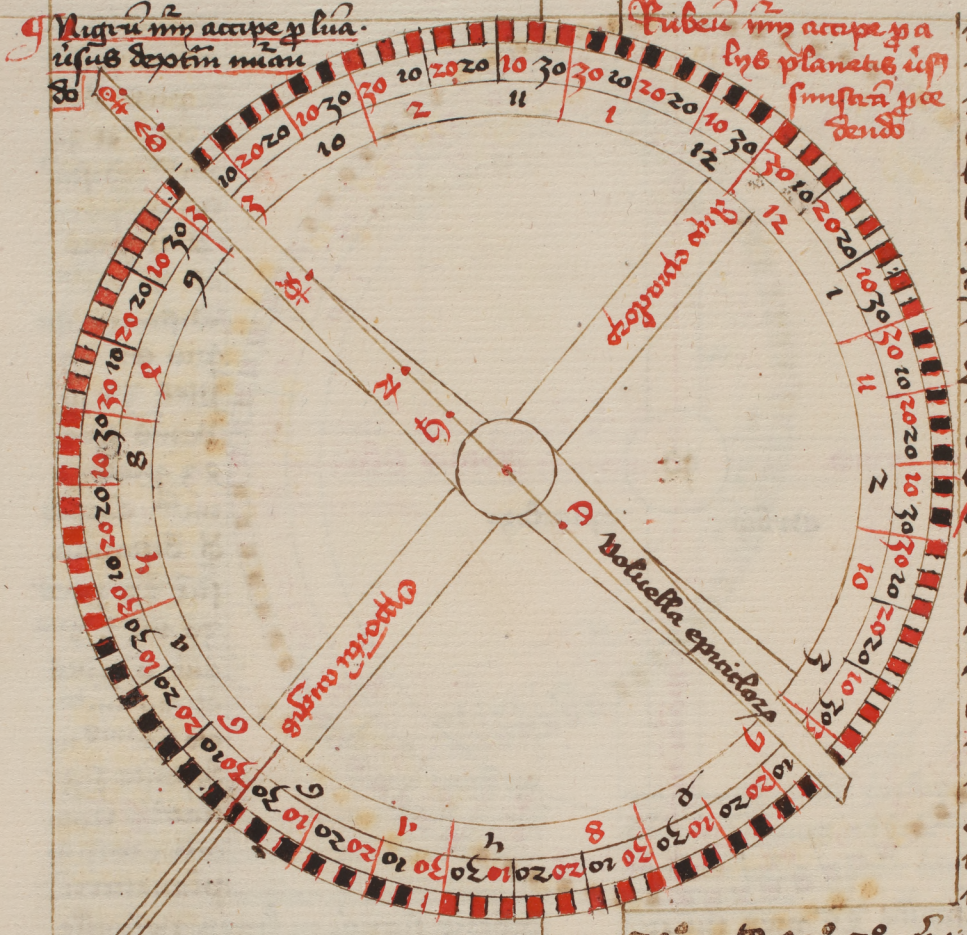


corpis ♄ a
centro p ſut
6 ptes de
60^mis et 20
m^ta / Diſta
cia corpor^m
♃ ii ptes
et 20 m^ta
/ Diſtancia cor
pis ♂ 39
ptes 34 q̄
/ Demū ueō
♀ 23 ptes 10
m^ta / Corpis
☿ diſtancia
ſut 22 ptes
20 m^ta. Dnc
aut 6 ptes
et 20 m^ta
eo 60^mis q̄
deſcēte ſig
nato ☽ Nota
cetera corpa
planetaru

tudinis voluelle ℓ 6 ptes ſut ſe
mdiat^r eius cui^s p̄m^s puctus mo
uet^r in centro p ℓ alia aute pte
ſz oppoita totmeb 38 ptes eo 60^s
/ Dcō nōdū q̄ diſtañ corpm plae
taꝝ dent locari in illa pte in qua
voluella comphendit ℓ 6 ptes
et diſtañ corpis lue in illa ubi vol
uella ♄z 38 ptes ☽ Diſtañ regrt^r

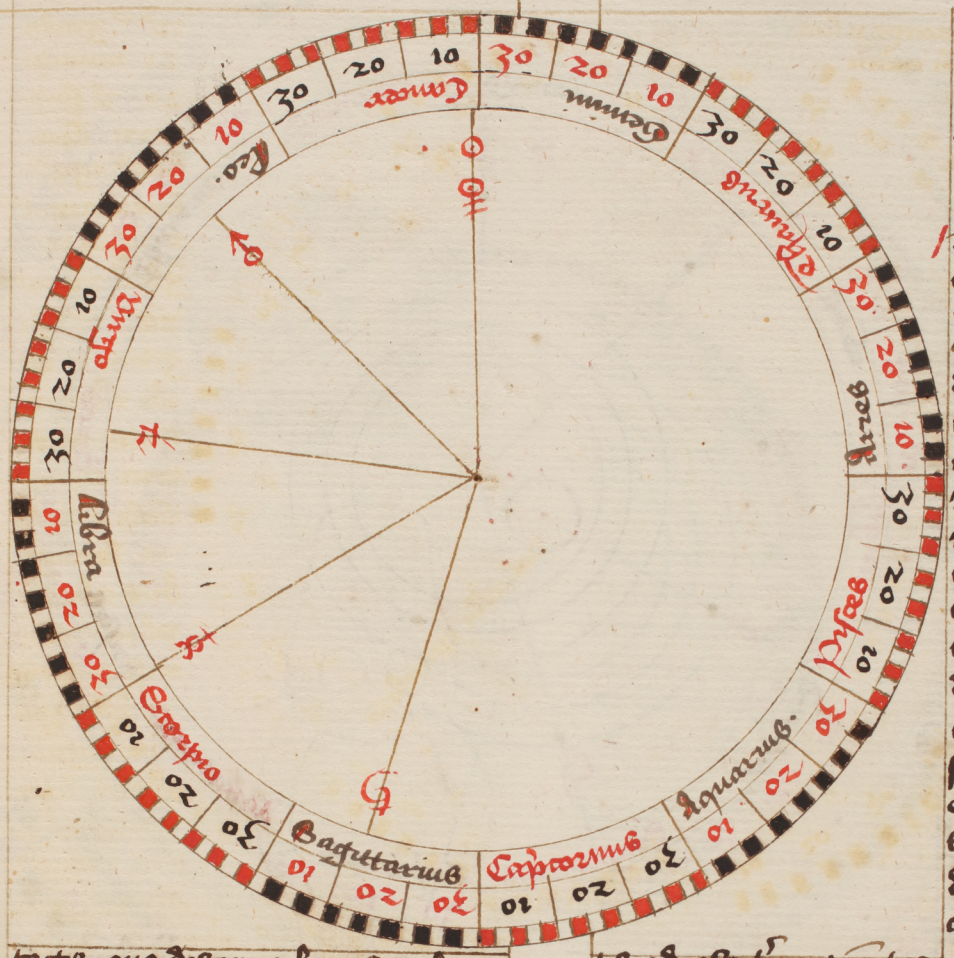
debent ſignari in linea voluelle
tiſiens z^m longr^e voluelle p ce
trū p. ita q̄ tent^r eoꝝ ponant^r
in una linea trā et ſim^r ☽ in
oppoſita pte cui^s motꝰ e cōmunib
motib^s aliozū planetaꝝ q̄ moue^r
in epi^lo cōi ſucceſſione ſignoꝝ i^r
ubi pom^r 12^m ſignū planetaru
ubi e p̄m^s p ☽ et ubi ii^m ubi z^m
☿ ☽ z ſic deſingulis.

Regula ſeu ☉ ☿ ☽ voluella.



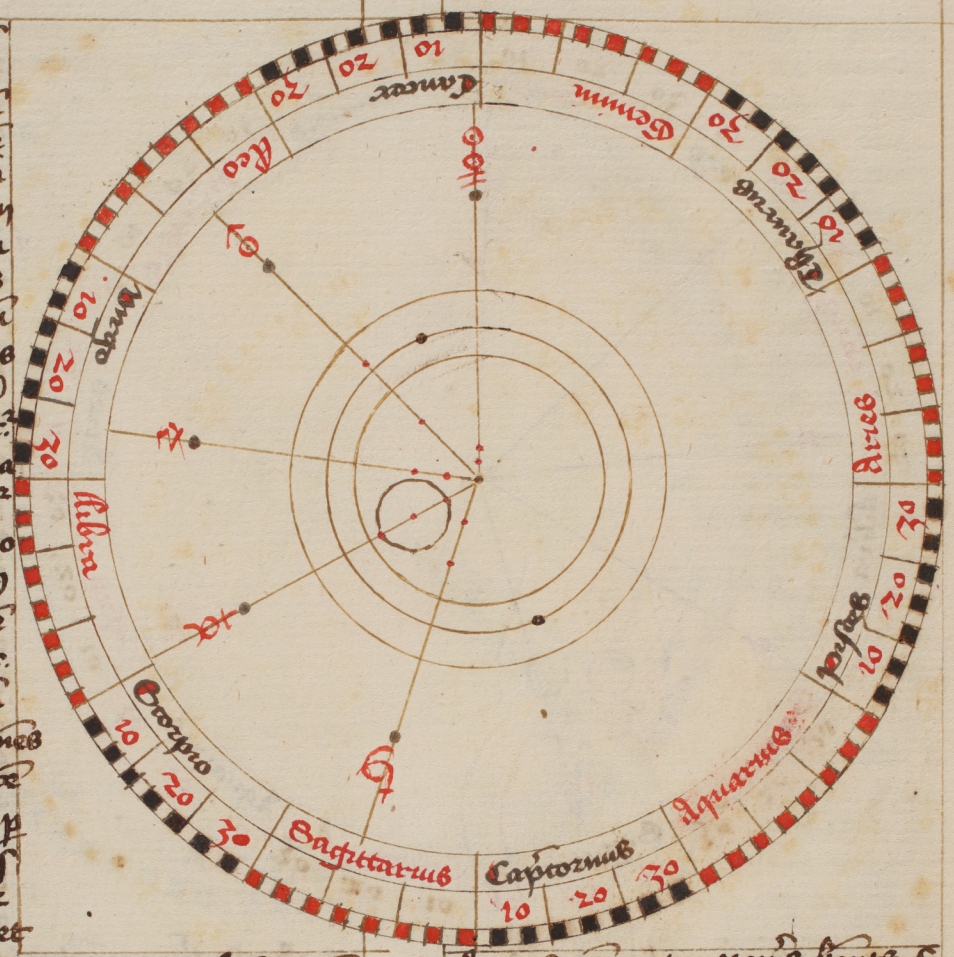
Qum aute auges planetaru equatiu in hō instrumeto lo care volūs vide in quo signo r gra du sigm zodiaci sit aux vm̄ cuiusq; ecentrici ibiq; facias nota/ Deinde duc lineam manifestā p notā sig natā in zodiaco a centro t. et ubi tūm habit ibi ēt aux ecentē equa tis illius planete de quo intendis laborare ubi grecia. Anno dom 1ę 2ę^to aux Saturni locat in 12^mo gradu 21. minuto 2ę. 2^o sagit tarij/ tra hat rgit linea acent t ipsius 12^m gdū 21 mīn 2^m 2^m sa gittarij et ibi ēt aux Saturni ete terni equatis Eadē e doctrina de auge ribus alioz planetaru msi q ponat tr loca ppria augiu ipoz/ Aux equatis Jovis reperit in 22^o gdū 3ę^o m^to ę2^o. 2^o. vltimis/ Aux vero martis signat 1ę^mo gdū 9. m^to. 44. 2^o leonis/ Aux sol et veneris in 22^o m^to 4^to 2^o tau/ Aux aut mercurij ultimi equatis in 29 gdū 3a^mo m^to 14. 2^o libre hec oīa patet in figura subsepta

Distantiae centroz equatis et defentis vm̄ cuiusq; planete a cent t sequent in linea sue au ges ppa 2^m distantia eoz ppaz. ubi gra/ Distāt centri defentis solis et equatis veneris complect 2. pūcta et 24. mīta ex illis 60^mis pre



tactis · que distancia locat² in linea ducta ad zz^m in^tu centri/ Distañ cent^i defentis veris 1· puctū zz m^ta 30· z^e/ Distañ cent^i defentis satin coprehendit z· pucta et 24 mi^ta a centro t· usus auge sua/ Distañ equat^s eius fut 6· pucta 40 mi^ta a centro t· usus auge sua que est in 12· gdu ti scrutinibus sagittañ/ Distañ cent^i defentis Jouis fut duo pucta 24 m^ta/ Distañ centri equatis ipius fut 4· pucta 30 mi^ta/ Distañ cent^i defent^s marti^s fut 6· pucta 30 mi^ta/ Distañ cet^i equat^s

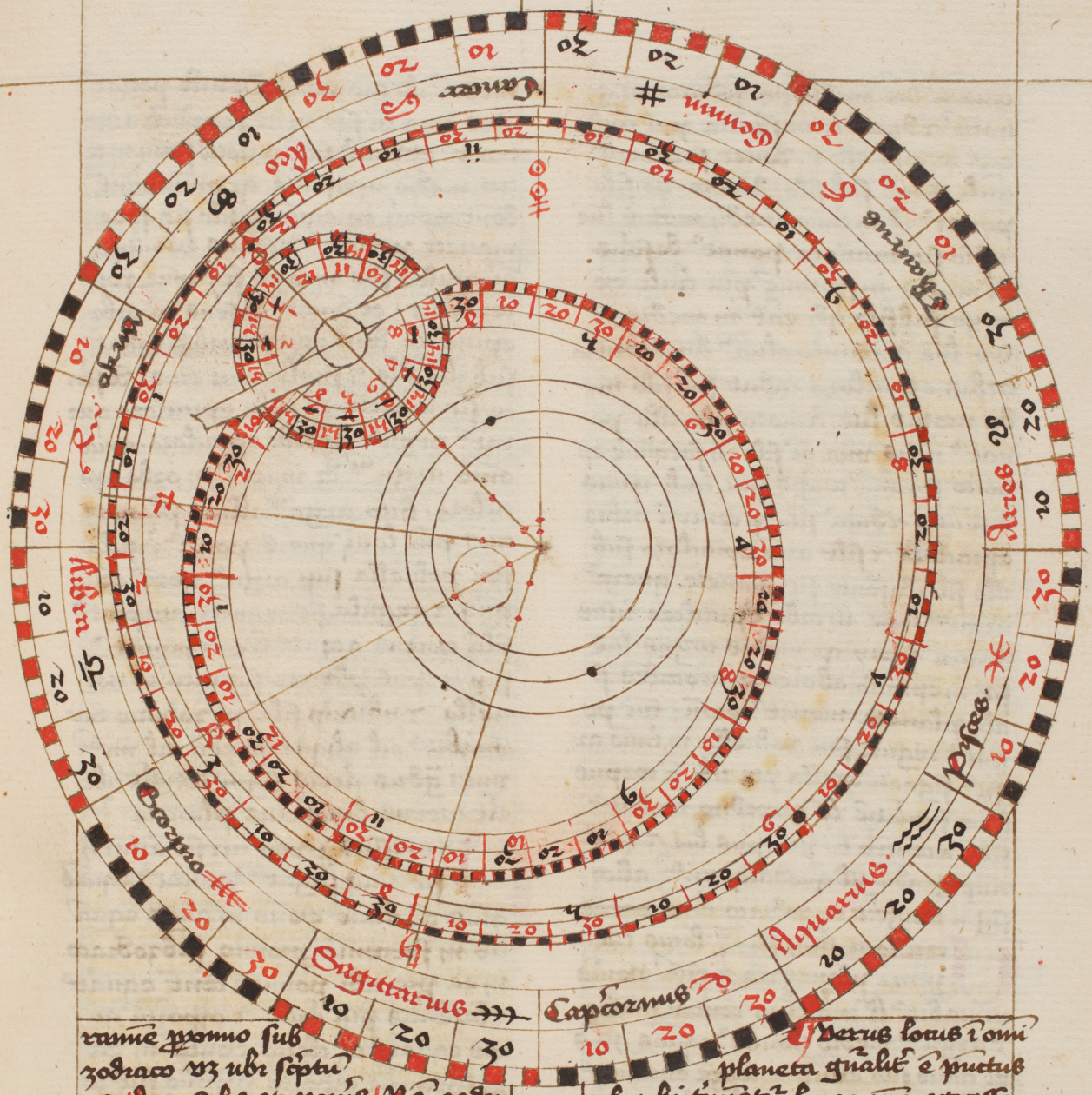
ipius iz
pucta/ Dis
tancia cen
tri defen
tis ajauri
q· pucta
/ distancia
cent^i pu
ctuli sep
pucta/ et
distañ cen
tri equat^s
ajaurij z
pucta de
mde fiat
ctulus sup
cent^i pu
ctuli zm
distancia
centri de
fentis qs
est q puc
torz zz^m
distancia
cent^i equa
tis qd est tm puctorz et cauet²
spaciu intrepte in quo spacio rota
uato locet² rotula uolubilis habes
in circūferencia eius medietē foraminis
ut aculeus defent^s potit intrare
sz centrū defentis ajaurij non est
fixū ß est mobile in eodem culo
puo/ Distañ siquid cent^i defentis
lune fut 12 pucta 28 m^ta a cē
tro t/ De mde ponat² pes cir mo
bilis in puctu t/ et extendat² alij
pes mobilis sup puctū 12^m et 28^m
mi^tu z circūducā² cirnus et fiat
culus vnus de mde costringat²



crimus us
q̄ ad mo
dica dista
ram a ce
tro desen
tis q̄ rectu
r fiat tau
lus alius
q̄ spaciu
me taulos
mtceptū
concauet.
in quo spa
co ponat
taulus mo
bilis cuiꝰ
centrū e
centru t.
in causen
tia continēs
medietate
forāmis p
ui z̄m dis
tanciā iz
puctoze et
z8 mtoze a cento t. q̄s foramē
erit centrū desentis lume/et oppo
sito centro in eode taulo fiat simile
foramē simlit tm distans a cento t.

Incipiunt utilitates equatorij pla-

Utilitates huiꝰ eq̄ netarū
torij planetaze sient hoc
mo q̄ ai centro mediꝰ r
rectis mediꝰ inueniūt equacō
nes r ea loca planetaze in hc equa
toro sme tabulis equationū quarū
opationes in nūb sut mapome tedi
ose/sent igr q̄lib planetaze sz
Saturnus Jouis martis Solis et aer
arcij r simlit rectū solis quod
idem est ai centro veris sient si
anguls eoz subtrahan amediꝰ
motibus ipoz ppiꝰ/Centrū aute
lue muemt ausendo mediū mo
tū solis amedio motu lue residu
u duplando r erit centrū lue me
diū Rectis tum suproz planeta
zoz nosamt ausendo me motū
ppiū vm tauq̄ ipoz a medio mo
tu solis residuū erit rectū me
diū Ex rectis veris hauriē et lue
sient p tabulas ppas ut alphon
equacō solis Haus distinguēt
r verus locus eius muemtur
hc modo ponat equas q̄s in so



ramē ꝓmmo sub
zodiaco vz ubi sēptū
est / duo solis et veneris / Na eadem
est duo eoꝝ rdeoꝝ argutiē solis et
centrū veneris rde sut / et ducat² rgi²
argutiē solis in equate qm. et ꝓpona
t² ibi nota / Deinde trahat² filum
acentº tre ꝑ argutiē mediū solis.
ul nota ipius et ubi tmabit² in cir
lo signoꝝ in illo gdu ul mto gdus
erit sol et vn cssum adhōm ꝓposita

planeta gnāliē e ꝓpius
orbi ubi tmat² linea trā egressa
acentº tre tisiens p corpus ipi pla

Veneris cursus hue q nete-
rat² sic / medius motus lune
inuestiga² in usteriº in tabulo sig
noꝝ / postea centrū eius meⁿ mue
miat² in eodē tabulo signoꝝ qz zodi
acus e equalis hue et fiat ibi nota
deinde ꝓtrahet² filū a acentº tre ꝑ

centrū lue medij in zodiaco ꝑsig
natū ⁊ ducat⁹ circumferencia pui tubi
cuiꝰ centrū est t. donec foramen
tubi tadat sub filo / dmoto vō filo
ponat⁹ rō in tmo medij motus lue
⁊ filo sic manete ponat⁹ defens
ti aculeo in foramine pui tubi ex
tenso sub filo qđ eat in medio ce
tro lue ⁊ circumvolua⁹ donec centro
orbis epicyclo tadat sub filo me
dij motus lue / dmoto filo illo po
nat⁹ actus vna cū filo in foramine op
posito foramini augis pui tubi ipius
defentis ⁊ ducat⁹ filū p centrū orbis
epicyclo ⁊ sit⁹ axis epicyclo sub
illo filo / defente sic manete querat⁹
argu^tus lume in orbe epicyclo ꝛsus
dextra ptem qz motus corpis lue
fit in epicyclo ab oriente in occidēs ꝓ
alijs planetis monet⁹ econ / tuc po
nat⁹ regula seu voluella in tmo ar
gu^ti signati cordilla ꝓte ubi e corpus
lume figuratū hꝰ expedito trahat⁹
filū a centro t. p corpus lue ⁊ que
cuq; gradū vl quodcuq; minū alicui
signi tetigerit in zodiaco ibi e verus
Vera loca tum sic / locus lue
proprius planetarius ⁊ era veris
rimabit⁹ hꝰ mo hito centro medio
⁊ argu^to medio ponat⁹ equas qnis
ti clauo suo cōis in auge equantis
in foramine ꝓximo subzodiaco / et
clauus cōis in opposito augis equa
tis in foramine oppito ita qꝺ axis e
quantis ⁊ oppm eius linealiter respi
ciat distantias centrorū illius plane
te cuiꝰ vm locū quos postea notat⁹
centro illius planete in equante ꝛm
successione signorū incipiendo ab au
ge ipius ⁊ ubi finiat⁹ centro eius
medij ibi fac nota Deinde ponat⁹
actus vna cū filo in ꝛo foramine a cen
tro t / et ducat⁹ filū p nota facta in ce
tro medio in equante qz omnia centra
dentū notati in equante / filo sic fixo
manente ponat⁹ defentis cōmitas
ti aculeo suo in ꝓximo foramine post
centrū t / et ducat⁹ defens ti orbe
epicyclo donec centrū orbis tadat
sub illo filo ⁊ similr axis eius / defen
te sic manente ti orbe epicyclo que
rat⁹ argu^tum in orbe epicyclo. quia
omne argu^tum dz inueni in orbe epi
cyclo / hito argu^to illius planete
cuiꝰ vm locū queris ponat⁹ regula
seu voluella sup argu^tū nota ad
pus ⁊ regula sic manete auferat⁹
filū exiens a centro tre ⁊ ponat⁹
sup corpus planete signatū in vol
uella ⁊ ubicuq; filū in zodiaco ter
minabit⁹ ul aliquē gradū ul minutū
vniꝰ cūdus actus signi tetigit ibi
erit verus locus eius planete
Processus p veō cursu apparen
sic inuestigat⁹ ponat⁹ equas
qnis ti clauo cōis in auge equa
tis in foramine ꝓximo subzodiaco
in ea ꝑte ubi ponit⁹ centrū equatis
⁊ defentis pui tubi ⁊ oppositi au
gis equatis ti clauo cōite in ea
in foramine oppito ꝓximo subzo
diaco ita qꝺ linea ducta ab auge
equatis qnis trāsit p centrū pui
tubi dicte in oppositū augis / hoc
fixo queat⁹ centrū apparens in equa
te qm ꝛsus sinistrū ⁊ in tmo co
siderationis pona⁹ nota Deinde
nota⁹ rō centro in ꝛo equante ꝓpo
fixo apparentij ꝛsus dextrū ꝑtem

r ponat² atus vna cū filo m centº
pui ẽculi r tralat² p idem centrū
filo sic manēte ẽmmoluat². primus
ẽculus dnº fortame m ẽcūsẽcia ea
dat sub ipo filo / amoueat² filū cū
acu r ponat² m pmio fortame post
centrū t. qđ idem e cū ẽcūsẽcia
pui ẽculi r duca² p centrū sigatu
m equate qm / eo sic manēte po
na² aculeus cōmutatus desẽtis m
fortame pui ẽculi qđ ẽat sub filo m
2º equate ypo apuerij demde duca²
desẽs cū orbe epiacloz dnº cen
trū orbis tadat subfilo r fiat de eo
ut dictū est de tribus supioribus.

Mediam cōiunctōm sic inuenies
Cruē motū medū solis et
medū motū lue ad die qua estias
coiunctōm soē / inude distanciā que
e mt̄ tim^r medij motus solis r ter
mi^r medij motus lue p medietate
motus cent^l me^r lue in vno die
ul in vna hoa ul mto r nūs quos
sigm^cat nūr diez ul hoaz ul mi
nutoz qui addendus e sup̄ tempus
in quo ipam distanciā inuestiga et
hꝫ si longit^do sit solis r si tim^r me^r
motus solis prędat tim^m me^r mo
tus lue / ez abipa ausendus est
si tim^r me^r motus lue sit in plu
ribus ḡdibus q̄ tim^r me^r motus
solis / sīa aut tali addōne ul sub
tractōne habis tpus coiunctōnis sol
r lue / tpus vē coiunctōnis inuestī
gat² hoz mo solis r lue p illa the
oriam cōsidēt² vbus locis solis r
ei lue addrem quo estimas fore
coiunctōm r si in eodem gradu uel
mto ḡdus tpus inuenianti² ert id
tpus pne hore vē coiunctōnis / sed
si hec vā loca solis r lue no repe
ant² in eodem loco tūc addat² iz
ps distancie locoz ipoz sup̄ ipam
vz distanciā r ptuctis duudat² p
vnū motū lue in vna hoā r vnus
p supacōm in vna hō ul minuto
ad tpus ul ei tempus coiunctōnis
r nūs quos ondit nūr horaz
ul mtoz / simili mo inuenies
tpus medie oppoconis sicut dtm
e de media coiunctōne / ul tempus
vē oppoconis ut pfatū est de vā
coiunctōne vā solis et lue oppoco
e coiuncto solis cū nadir lue vā
pendus oz operari cū distanciā que
est mt̄ loci solis r nadir lue sicut
operandū est cū distanciā in coiunctōne
mt̄ solem r luna / et sic inuenies
tpus ceroz aspectuū solis et lune
qr eoz septulis aspectibus e coiuncto
solis cū b oma a luna. r aspectus
etus e coiuncto solis cū 9 o^mo ḡdu
a luna / vā simr oz operari cū dis
tancia que e mt̄ illos ḡdus mt̄
solem r luna ad hendū vūm tpus
horo aspectuū hꝫ eā mo vnūsq^r
inuenit². cūi tpus oīm aspectuū
quorolibz planetaz oz distanciā
mt̄ aspectū planetaz druđ p
id qđ remanet post subtrōnem
vī motus planete tardioris in ali
quo tpe a vō motu planete velo
cioris in eodem tpe / nūs vō quos
addendus est sup̄ distanciā inue
tā mt̄ timos aspectū r hꝫ si longi
tudo fuit tardioris vl ausendus
a tpe inuentōnis ipius distancie si
longit^do fuit velocioris placete r he
bi cūi tpus aspectuū planetaz.

Si scē voluerīs vīm motū plane
te vno die vl vna hoa vl mto
qui dra buch planete exāmia per
mstrtū vīm locū planete adimi
u vnig drei r adimicū sequetis drei
dra n mtō hor loca sic inuēta erit
buch planete in vno die vl vna hō
vl mto hoe / et hō modo inuenies
vīm motū planete in alīas drebg
Si scē desideas utz ir in ano
planeta fuit retrogradus
stacionarius vl directus / cruēat z ve
rus locus p theoricam adimicū drei
in quo hor scē voluīs deinde que
cā locū eius vīm adimicū sequetis
drei / nā si utroq; tpe in eodem loco
reprat z erit stacionarius / si uō in
sequeti tpe in pauciorib; gradib;
reprat z qua in pnti tpe erit ret
gradus / et si in sequeti tpe in plu
rib; gradib; vl mtis mueā z q
in pnti tpe est directus / tuc quide
pma contingit in sinistra pte orbis
excentrici / et 2a statō in dextera pte
eusdem et sic est finis huius opis

Explicit exposicō cū suis utilitati
bus tocātis instrumēti qd dicī
equatorīū planetaz.

Jupiter ab vna coniunctione Saturni z solis
vl Saturni et veneris vl Saturni z mercurii
usq; ad aliam sunt dies 378 hore 14 minuta 40 . 26
secunda 12.

Venus ab vna coniunctione Saturni z lune ad
aliam sunt dies 224 . 22 . 22 . 12 . 12.

Venus ab vna coniunctione Jouis z lune ad
aliam sunt dies 224 . 29 . 12 . 10 . 1 . 12.

Venus ab vna coniunctione Saturni z Jouis
ad alia 2 . 0 . 14 . 24 . 28 48 12
et quiescit pagrat 10 signa phica et
2 gdus 48 21 40 24 . Saturnus uō
8 signa phica 2 . 48 21 40 24
et est in 19 annis et 218 diebus et
12 horis et 2 12 minutis.

Mercurius ab vna coniunctione Saturni z aparis usq;
ad alia sunt 12 . 12 . 14 hore 18 . 29 . 29
et aparet pagrat 6 signa phica et
2 12 gdus . quiescit uō 2 12 gdus

Mercurius ab vna coniunctione Jouis cū sole
vl Jouis cū venere / vl Jouis cū aparet
cum mercurio 6 . 38 24 hore 4 39 46

Mercurius ab vna coniunctione Jouis cum
aparet ad alia sunt 12 36 26 9 48.

Mercurius ab vna coniunctione aparis cū
sole vl aparis cū venere vl aparis
cū mercurio sunt 12 49 44 46 29 36.

Mercurius ab vna coniunctione aparis et
luce ad alia sunt 28 24 11 24 . 1 . 32.