

Cowets

73

FK 187.3 = 187.4

1011

Vico's coat

FK 187.3

Komet van de Vico 1844.

Elementen in 1844

	A	B
Doorgang 1844 Sept 2, 514710 m. l. Perseus		Sept. 2, 511298 m. l. Perseus
Length Perih.	342° 30' 56", 92	342 30 49, 61
Length Knorp (log. 2 ^{de})	63 46 56, 07	63 49 0, 11
μ	650", 20130	649", 1503
log a	0, 4912998	
Excentriciteit	0, 61727362	$\varphi = 38^{\circ} 8' 42", 03$
Helling	2054' 47", 64	2 54 50, 33
Periapsis	1993" 6"	

Perturbaties van 1844 tot 1850

	A	B
$\Delta \mu = +2", 24110$		$\Delta \mu = -0", 41966$
$\Delta M = +53' 31", 14$		$\Delta M = +51' 14' 41", 201$
$\Delta e = +0, 0010554$		$\Delta \varphi = -2' 55", 20$
$\Delta P = -2' 39", 42$		$\Delta \pi = -2' 12", 17$
$\Delta \delta = -53", 02$		$\Delta \delta = +3", 22$
$\Delta i = +1", 77$		$\Delta i = +0, 67$

Elementen in 1850

	A	B
Doorgang 1850 Febr. 11, 6192 m. l. Perseus		Febr. 18, 609751 m. l. Perseus.
(geteld van middag)		
Length perih.	342° 32' 4", 3	342 33 12, 27
— Knorp	63 49 49, 4	63 52 51, 27
Helling	2 54 48, 59	2 54 51, 76
μ	652", 41161	648, 73064
Periapsis	1986", 9"	
log a	0, 4903020	0, 4919615
Excentriciteit	0, 6183290	$\varphi = 30^{\circ} 5' 46", 83$

Ephemerie van B 1850

mid. middag in Perseus	α	δ	Δ	$\alpha \odot$	$\delta \odot$
Febr 1	322° 30	-16° 26'	0, 3382	310	-17°
"	326 26	10 11	0, 3369	322	
" 9	330 14	13 52	0, 3360	323	-10
" 13	334 0	12 29	sc		
" 17	337 44	11 3	0, 3354	331	-12
" 21	341 27	9 33	cb		
" 25	345 7	0 2	63	338	-9
Maart 1	348 40	6 29	74		
"	352 21	4 00	90	346	-6
" 7	355 50	1 20	0, 34 09		
" 13	359 26	1 46	32	353	-3

Perturbations in 1846 to 1850 (A.)

	$\delta \mu$	δM	δe	δP	δQ	δi
4	+2", 1710	+49' 46", 90	+0.0011063	-2' 31", 90	-12", 00	+1", 51
7	-0.0125	+3 6, 67	-0.0000059	-0 33, 65	+5, 92	+0.09
10	+0.0761	+2 29, 63	-0.0000393	+0 23, 10	-6, 95	+0.17
9	+0.0102	+0 8, 64	-0.0000057	+0 3, 11	+0.01	0.00
Sum	+2", 2448	+53' 31", 84	+0.0010544	-2' 39", 12	-53", 02	+1", 77

$\delta \tau = -4", 9228$

Perturbations in 1850 to 1855 (A.)

	$\delta \mu$	δM	δe	δP	δQ	δi
4	-1", 0636	-16' 25", 72	-0.0010058	-3' 3", 38	+2' 5", 09	-0", 26
7	+0.0670	+3 41, 34	+0.0000963	-0 35, 29	-0 9, 04	+0.10
10	+0.0212	-0 0, 60	-0.0000006	+0 3, 68	-0 0, 28	0.00
9	0.0584	+1 59, 20	-0.0000213	-0 5, 15	+0 0, 24	-0, 12
Sum	-1", 7170	-10' 45", 78	-0.0009314	-3' 40", 14	+1' 56", 01	-0", 10

$\delta \tau = +0", 9924$

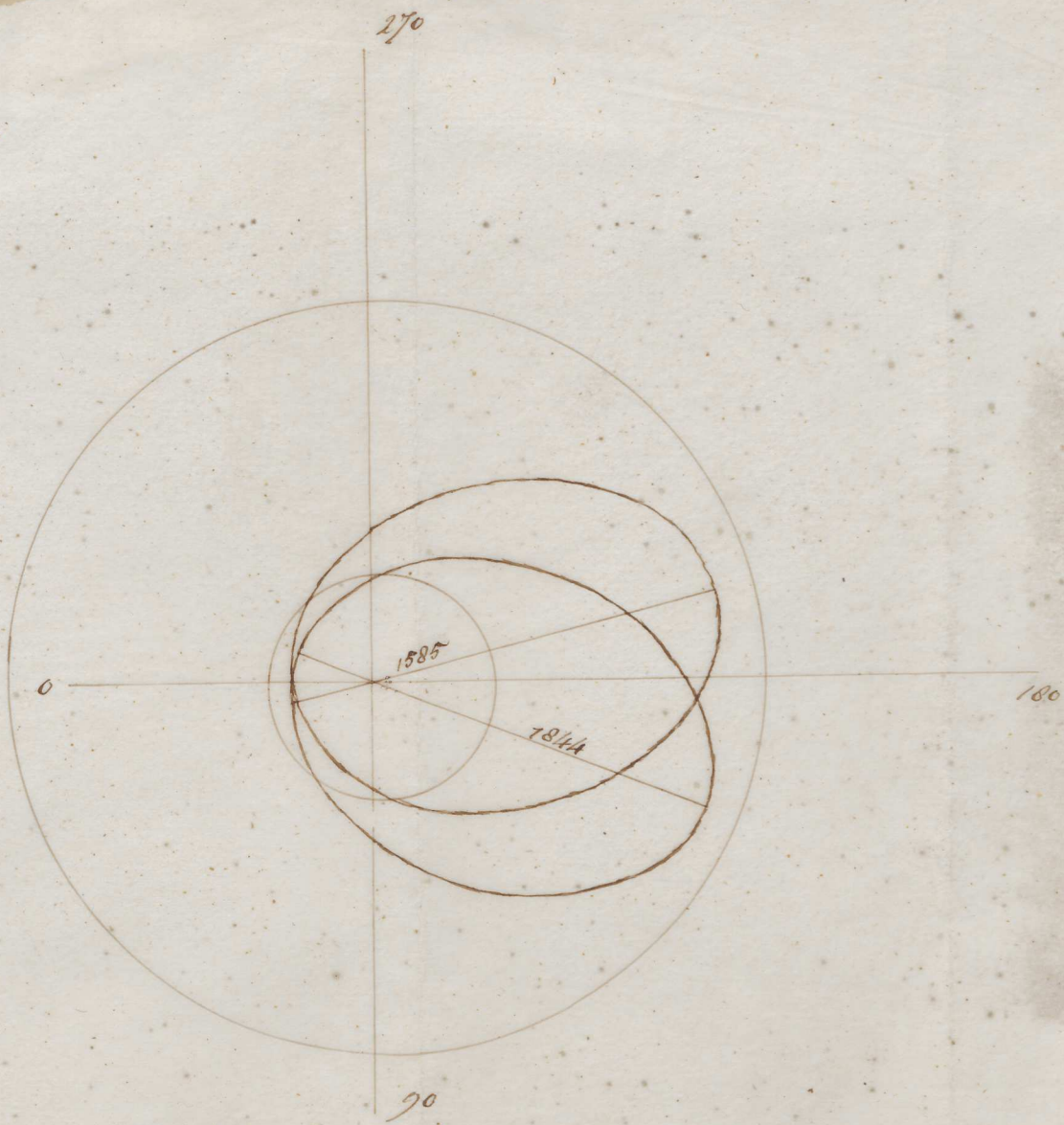
Elements in 1855 (A.)

Doornik 1855 July 23, 1830 m. l. Perseus (van miden)

Right asc.	342° 32' 10", 4	m. Aug. 23 July 55
Knorp	63 55 31, 7	
Half	2 54 47, 67	
μ	650", 7291	
Orbit.	1991", 15"	
Log a	0, 4910639	
Excentr.	0, 6173976	

Ephemeride in 1855 (A.)

1855	M	δ
July 10	0 6, 9	-3 22'
July 1	1 12, 1	+3 7
15	2 7, 5	+8 22
31	3 6, 5	+13 11
Aug 16	3 58, 3	+16 46
30	4 36, 3	+18 50
Sept 15	5 9, 9	20 22
Oct 1	5 31, 2	21 21
17	5 38, 6	22 8
31	5 32, 9	22 44



Komet van de V'lo

January 1846.

*Roemer van de Vico
1846*

Ephemeride voor de Komeet van de Vico.

Midd. t. Leyde	Anomalie	Rad. Vector	Geoc R	Geoc Deel.	Afstand tot \odot
1046. Maart 13.5	33° 26'	1.6229	01° 23'	36° 34'	1.2046
17.5	35° 59	1.6455	03 53	30 30	1.3437
21.5	30 27	1.6697	06 29	40 14	1.4041
25.5	40 52	1.6951	09 10	41 46	1.4659
29.5	43 11	1.7210	01 57	43 7	1.5285

Komet van de Vico 1846.

$t = \text{Febr. 14, 32902 m.t.l.}$ $\alpha = 60^{\circ} 39' 0''$ $\delta = -5^{\circ} 9' 30''$ $\theta = 325^{\circ} 47' 45''$ $\rho = 9,99486$
 $t' = 21, 35760$ $\alpha' = 72^{\circ} 17' 20''$ $\delta' = +0^{\circ} 46' 50''$ $\theta' = 332^{\circ} 52' 46''$ $\rho' = 9,99549$
 $t'' = 27, 30963$ $\alpha'' = 75^{\circ} 25' 40''$ $\delta'' = +5^{\circ} 11' 20''$ $\theta'' = 330^{\circ} 56' 31''$ $\rho'' = 9,99612$

420	432	435
$\alpha = 60^{\circ} 39' 0''$	$\alpha' = 72^{\circ} 17' 20''$	$\alpha'' = 75^{\circ} 25' 40''$
$\theta = 332^{\circ} 52' 46''$	$\theta' = 332^{\circ} 52' 46''$	$\theta'' = 332^{\circ} 52' 46''$
$\alpha - \theta = 95^{\circ} 46' 14''$	$\alpha' - \theta' = 99^{\circ} 24' 34''$	$\alpha'' - \theta'' = 102^{\circ} 32' 54''$

$t'' = 27, 30963$	$t' = 21, 35760$
$t' = 21, 35760$	$t = 14, 32902$
$t'' - t' = 6, 03195$	$t' - t = 7, 02866$

$f + t'' - t' = 0, 7004577$
 $t' - t = 0, 8468725$

$\frac{f + t'' - t'}{t' - t} = 9,9335852$

$\theta'' = 330^{\circ} 56' 31''$	$\alpha'' = 75^{\circ} 25' 40''$
$\theta = 325^{\circ} 47' 45''$	$\alpha = 60^{\circ} 39' 0''$
$\theta'' - \theta = 13^{\circ} 0' 46''$	$\alpha'' - \alpha = 6^{\circ} 46' 40''$

420	435
$\alpha = 60^{\circ} 39' 0''$	$\alpha'' = 75^{\circ} 25' 40''$
$\theta = 325^{\circ} 47' 45''$	$\theta'' = 330^{\circ} 56' 31''$
$\alpha - \theta = 102^{\circ} 51' 15''$	$\alpha'' - \theta'' = 96^{\circ} 29' 9''$

$\frac{90}{12}$

1773	π	459
86		121 10
c		61 30
9		1, 21

$t'' = 27, 30963$
 $t = 14, 32902$
 $t'' - t = 13, 06061$

14^h 20' byen
 5 20 vastheid
 5 37 1ste bereik 747
 6^h 47' 6 bereikwijze

10^h 45'

Komet ontdekt door de Vico te Rome
den 24 Januarij 1846

Oorspronkelijke waarnemingen.

Febr. 14,	3290 m. l. Leiden	N. 67° 45' 39" 7	Decl. + 16° 39' 59" 6	(Hamburg)
21,	3577	70 41 41,1	23 3 25,7	(Leiden)
27,	3896	73 32 20,5	27 49 2	(Leiden)

Elementen berekend
door de Heeren
Kiehl
Burgersdyk
Naber

Elementen berekend
door den
Heer
Oudemans

log M	0,06199	0,06204
K	0,2566	0,25663
r	1,5127	1,5125
r"	1,5553	1,5553
λ	108° 16' 49"	108 17 25
λ"	114 47 34	114 48 26
β	- 3 13 35	- 3 13 32
β"	+ 3 38 34	+ 3 38 31
δ	111 20 16	111 21 1
ι	46 35 0	46 33 10
π	92 32 28	92 27 58
q	1,4891	1,4886
log q		0,17278
Doorgang		Jan. 26, 3115
		Reghthoefende

Middelste waarneming
door den Heer Oudemans
uit zijne elementen

N	70° 36' 33"	70 40 55	46"
Decl	23 5 40	23 3 22	4"

$r+r'' = 3,0779$

$3,0773$

$g = 0,40025$
24412
37

$g = 0,40017$

$\frac{1}{2}k = 0,00013$

$9,65270$
 ~~$9,24412$~~
 $9,40050$ ¹²

$9,65270$
 $0,24400$
 $9,40862$ ¹²

$k^2 = 0,01716$

$0,81724$

$k^2 = 0,065639$

$k^2 = 0,065651$

$k^2 = 0,039919$

$0,039919$

$u^2 = 0,025720$

~~$0,025720$~~
 $0,025732$

$l.u^2 = 0,41027$

$l.u^2 = 0,41047$

$l.u = 9,20513$

$9,20523$

$u = 0,16037$

$u = 0,16041$

$0,16037$	$0,16037$
$0,16049$	$0,13396$
$0,32086$	$0,29433$
$0,51701$	$0,46003$
$0,44926$	$0,38506$
$0,06775$	$0,00377$
$0,13550$	$0,16754$
$1,3662$	$1,4700$
$0,9204$	$0,9677$
$2,2946$	$2,4407$
$0,36071$	$0,30751$
$0,18035$	$0,19375$
$1,5140$	$1,56225$
	<u>$1,5148$</u>
	$3,0770$

$0,16041$	$0,16041$
$0,16049$	$0,13396$
$0,32090$	$0,29437$
$0,51706$	$0,46009$
$0,44926$	$0,38506$
$0,06780$	$0,00383$
$0,13560$	$0,16766$
$1,3665$	$1,4712$
$0,9204$	$0,9677$
$2,2949$	$2,4411$
$0,36076$	$0,30759$
$0,18030$	$0,19379$
$1,5149$	$1,5624$
	<u>$1,5149$</u>
	$3,0773$

$r = 1,5149$

$r'' = 1,5624$

$9,40062$
 $0,25622$

Welld Hoogel. Heer!

Denkende aan het spreekwoord: Errare humanum est, & zocht ik nog eens in Inckes Jahrb. de Coördinaten voor de zon in de middelste waarneming op, & bevond dat W^d die voor de eerste & niet voor de middelste waarneming hadt opg. zocht. Ik vond; voor Feby 21. 358

$$X = + 0.00614$$

$$Y = - 0.41421$$

$$Z = - 0.17982$$

Daar W^d mischien heden morgen die andere waarden aan andere heere, zoudt mogt mededeelen, zoo neem ik de vryheid in dikh by dese te melden.

T. T.

in haast.

J. A. C. Oudemans

Wet^o Hoogst. Heer

Den Heere J. Kaiser.

Heere.

$\log 2k(t-t) = 9,65257 \quad A^2 = 0,039919 \quad B^2 = 0,92061 \quad B^2 = 0,96988$
 $\log b = 9,44926 \quad \log b' = 9,30506 \quad c = +0,168493 \quad c' = +0,133956 \quad u = k^2 A^2$

$1 - 2,39900 = r+r'$
 30003
 $\log(r+r') = 0,14582$
 $0,19001$
 $0,43746$
 $2) \quad 0,21873$
 $0,57084$
 $9,65257$
 $1/(r+r')^2 = 0,12093$
 $\eta = 0,56516$
 $9,08253$
 $\frac{1}{2}\mu = 0,60026$
 $\rho = 9,65257$
 $9,65283$
 $(r+r')^2 = 0,19001$
 $0,57718$
 $9,46202$
 $8,92564$
 $k^2 = 0,004264$
 $A^2 = 0,039919$
 $u^2 = 0,044345$
 $1/u^2 = 0,64604$
 $1/u = 9,32342$
 $u = 0,2050$

$r+r' = 3,3042$
 $\log(r+r') = 0,52946$
 $0,26473$
 $0,79419$
 $9,65257$
 $8,05838$
 $\eta = 0,0722$
 $\frac{1}{2}\mu = 0,00009$
 $\rho = 9,65257$
 $9,65266$
 $0,26473$
 $1/k = 9,30793$
 $8,77506$
 $k^2 = 0,059604$
 $A^2 = 0,039919$
 $u^2 = 0,019765$
 $1/u^2 = 8,29590$
 $1/u = 9,14795$
 $u = 0,14059$

$r+r' = 3,0883$
 $\log(r+r') = 0,48972$
 $0,24406$
 $0,73450$
 $9,65257$
 $8,91799$
 $\eta = 0,0828$
 $\frac{1}{2}\mu = 0,00012$
 $9,65257$
 $9,65269$
 $0,24406$
 $9,40703$
 $8,81566$
 $k^2 = 0,065412$
 $A^2 = 0,039919$
 $u^2 = 0,025493$
 $1/u^2 = 8,40642$
 $1/u = 9,20321$
 $u = 0,15967$

$r+r' = 3,0729$
 $\log(r+r') = 0,48750$
 $0,24377$
 $0,73132$
 $9,65257$
 $8,92125$
 $\eta = 0,08341$
 $\frac{1}{2}\mu = 0,00013$
 $9,65257$
 $9,65270$
 $0,24377$
 $9,40893$
 $8,81786$
 $k^2 = 0,065745$
 $A^2 = 0,039919$
 $u^2 = 0,025026$
 $1/u^2 = 8,41206$
 $1/u = 9,20603$
 $u = 0,16071$

u	0,21050	0,21050	0,14059	0,14059	0,15967	0,15967	0,16071	0,16071
cc	0,16049	0,13396	0,16049	0,13396	0,16049	0,13396	0,16049	0,13396
log	0,37907	0,34454	0,30908	0,27455	0,32016	0,29363	0,32920	0,29467
b	9,57872	9,53724	9,49007	9,43862	9,51609	9,46780	9,51746	9,46934
b'	9,44926	9,30506	9,44926	9,30506	9,44926	9,30506	9,44926	9,30506
2b	0,12946	0,15210	0,04081	0,05356	0,06683	0,08274	0,06820	0,08428
2b'	0,25892	0,30436	0,08162	0,10712	0,13366	0,16548	0,13640	0,16856
2c	1,8152	2,0154	1,2060	1,2797	1,3604	1,4630	1,3690	1,4747
B^2	0,9204	0,9699	0,9204	0,9699	0,9204	0,9699	0,9204	0,9699
k^2	2,7436	2,9853	2,1352	2,2496	2,2088	2,4337	2,2974	2,4441
1/k^2	0,43032	0,47499	0,32944	0,35211	0,35961	0,38627	0,36124	0,38812
1/r	0,21916	0,23749	0,16472	0,17605	0,17980	0,19313	0,18062	0,19406
r	1,6564	1,4270	1,4613	1,4999	1,5129	1,5600	1,5157	1,5634
		1,6564		1,4613		1,5129		1,5157
		3,3042		2,9612		3,0729		3,0791

$2,39900$
 $3,3842 + 0,9052 = 4,2894$
 $2,9612 - 0,4230 = 2,5382$
 $\Delta 1/2$
 $9,62634$
 $9,25260$
 $9,12866$
 $9,10402$
 $+ 0,1271$
 $3,0883$

$0,423$
 $0,3$
 1269
 127
 $3,088$

$3,0883 - 0,0154 = 3,0729$
 $3,0729 + 0,0062 = 3,0791$
 $774 \quad 0,00003849$
 $45 \quad -12$
 109
 $3,0791$
 $2,0779$
 70

$+ 0,0316$
 $7,7924$
 $5,5040$
 $8,4957$
 $7,0851$
 $0,00122$
 $45/152/45 \quad 1/93$
 462
 $9 \quad 3,0773$
 $0,3$
 27

+ 4

$$\mu = 0,16041$$

$$\gamma \log \varphi = 0,10690$$

$$\zeta = 2,42702$$

$$\zeta h = 9,45102$$

$$\zeta p = 9,97600$$

$$\lambda = 0,06410$$

$$\zeta p'' = 0,04010$$

$$\rho = 0,94624$$



$$\zeta p = 9,97600$$

$$\zeta(\lambda - \omega) = -2,34723$$

$$\zeta \lambda = -1,32323$$

$$\zeta \mu = -0,21049$$

$$\zeta \rho = 9,99480$$

$$\zeta \lambda = 0,98810$$

$$\zeta = -1,19859$$

$$\zeta = -0,07067$$

$$\zeta p'' = 0,04010$$

$$\zeta(\lambda - \omega) = -0,05293$$

$$\zeta \lambda = -2,09311$$

$$\zeta \mu = -0,12391$$

$$\zeta \rho'' = 2,99612$$

$$\zeta \lambda = 0,99111$$

$$\zeta = -1,11502$$

$$\zeta \gamma = -0,04720$$

$$\zeta p = 9,97600$$

$$\zeta(\lambda - \omega) = 9,98898$$

$$\zeta \lambda = 9,96490$$

$$\zeta(\lambda - \omega) = -9,80631$$

$$\lambda - \omega = 142 24 50$$

$$\omega = 325 47 45$$

$$\lambda = 460 12 35$$

$$\zeta(\lambda - \omega) = 9,70530$$

$$\zeta p'' = 0,04010$$

$$\zeta(\lambda - \omega) = 9,99721$$

$$\zeta \lambda = 0,03739$$

$$\zeta(\lambda - \omega) = -9,99011$$

$$\lambda'' - \omega'' = 135 03 10$$

$$\omega'' = 338 56 31$$

$$\lambda'' = 474 35 41$$

$$\zeta(\lambda - \omega) = 9,81440$$

$$\zeta p = 9,97600$$

$$\zeta \rho = -0,95556$$

$$\zeta \rho = -0,93156$$

$$\zeta \rho = -0,75188$$

$$\mu = -30 14 0'' 13 57$$

$$\zeta \rho = 0,75198$$

$$\zeta \rho = 0,80036$$

$$\zeta(\lambda - \omega) = -0,75188$$

$$\zeta \rho'' = 0,04010$$

$$\zeta \rho'' = +0,95011$$

$$\zeta \rho'' = +0,99032$$

$$\zeta \rho'' = +0,80541$$

$$\rho'' = +3 39 20$$

$$\zeta \rho'' = 0,80454$$

$$\zeta \rho'' = 0,19370$$

$$\lambda'' = 114 03 41''$$

$$\lambda = 100 12 35$$

$$\lambda'' - \lambda = 6 23 6''$$

$$\zeta \rho = -0,75188$$

$$\zeta(\lambda - \omega) = 9,99730$$

$$\zeta \lambda = -0,74918$$

$$\zeta \mu = -0,056128$$

$$\zeta \lambda = +0,120015$$

$$\zeta \mu = 9,07923$$

$$\zeta(\lambda - \omega) = 9,04621$$

$$\zeta(\lambda - \omega) = 0,03302$$

$$\zeta(\lambda - \omega) = +0,00541$$

$$\zeta(\lambda - \omega) = +0,77239$$

$$\lambda - \omega = 20 23 19''$$

$$\lambda =$$

$$\omega =$$

$$\lambda - \omega = 8,77765$$

$$\zeta \lambda = 0,03976$$

$$\zeta = 44 03 30''$$

$$\zeta(\lambda - \omega) = 0,03302$$

$$\zeta(\lambda - \omega) = -0,75188$$

$$\zeta(\lambda - \omega) = -0,71006$$

$$\lambda - \omega = 35 40 13''$$

$$\lambda = 468 12 35$$

$$\omega = 111 12 22''$$

$$\zeta(\lambda - \omega) = -0,71820$$

$$\zeta \lambda = 0,03360$$

$$\zeta \lambda = 47 02 50''$$

$$\zeta \lambda = 9,83204$$

$$\lambda = 460 12 35$$

$$\omega = 111 12 22$$

$$\lambda - \omega = 357 0 13$$

$$\zeta(\lambda - \omega) = -0,71006$$

$$\zeta \lambda = 9,83204$$

$$\zeta \lambda = -0,00602$$

$$\nu - \omega = 355 03 37''$$

$$\omega = 111 12 22$$

$$\nu = 466 47 59$$

$$\nu = 106$$

$$\tau'' = 1,5624$$

$$\zeta \tau = 0,18030$$

$$\zeta(\nu - \omega) = 9,99414$$

$$0,17452 \times 1,4946$$

$$\zeta \lambda = 0,83123 \times 0,0670$$

$$\zeta \lambda = 6,66246 \times 0,00460$$

$$\zeta \lambda =$$

$$\lambda'' = 474 35 41$$

$$\omega'' = 111 12 22$$

$$\lambda'' - \omega'' = 3 23 19''$$

$$\zeta(\lambda'' - \omega'') = 9,77241$$

$$\zeta \lambda'' = 9,83204$$

$$\zeta \lambda'' = 0,94037$$

$$\nu'' - \omega'' = 4 05 55''$$

$$\omega'' = 111 12 22$$

$$\nu'' = 116 11 17$$

$$\nu'' = 106 47 59$$

$$\nu'' - \nu = 9 23 18''$$

$$\zeta(\nu'' - \nu) = 4 41 39''$$

$$\zeta \tau = 0,18030$$

$$\zeta(\nu'' - \nu) = 9,21267$$

$$\zeta \lambda = 9,39305$$

$$\zeta \lambda = 0,78610$$

$$\zeta \lambda = 0,061108$$

$$\zeta \lambda = 0,00460$$

$$\zeta \lambda = 0,065708$$

$$\zeta(\lambda - \omega) = 1,08557$$

$$\zeta \tau = 0,09019$$

$$\zeta \lambda = 0,99530$$

$$\zeta \lambda = 9,8942$$

$$\zeta(\lambda - \omega) = 0,91290$$

$$\zeta \tau = 0,09609$$

$$\zeta \lambda = 9,00907$$

$$\zeta \lambda = 9,99018$$

$$\zeta \lambda = 9,7753$$

$$\zeta \lambda = 9,07510$$

$$\zeta \lambda = 9,90901$$

$$\zeta \lambda = 0,83463$$

$$\zeta \lambda = 0,4020$$

$$\zeta \lambda = 163210$$

$$\zeta \lambda = 466400$$

$$\zeta \lambda = 309270$$

$$\zeta \lambda = 116 11 17$$

$$\zeta \lambda = 172 44 17$$

$$\zeta \lambda = 9,99540$$

$$\zeta \lambda = 9,91444$$

$$\zeta \lambda = 0,08555$$

$$\zeta \lambda = 0,17118$$

$$\zeta \lambda = 1,4031$$

$$\zeta \lambda = 0,19'30''$$

$$\zeta \lambda = 16 39 0$$

$$\zeta \lambda = 106 47 59$$

$$\zeta \lambda = 90 08 59$$

$$\zeta \lambda = 116 11 17$$

$$\zeta \lambda = 26 2 18$$

$$\zeta \lambda = 9,16073$$

$$\zeta \lambda = 9,91445$$

$$\zeta \lambda = 0,08555$$

$$\zeta \lambda = 0,17110$$

$$\zeta \lambda = 1,4029$$

$$\zeta \lambda = 0,17110$$

$$\zeta \lambda = 0,08555$$

$$\zeta \lambda = 0,25665$$

$$\zeta \lambda = 9,96013$$

$$\zeta \lambda = 9,70340$$

$$\zeta \lambda = 16 39 0$$

$$\zeta \lambda = 11,0530$$

$$\zeta \lambda = 0,04340$$

$$\zeta \lambda = 9,70348$$

$$\zeta \lambda = 0,34000$$

$$\zeta \lambda = 21,078$$

$$\zeta \lambda = 45,329 \text{ Jan.}$$

$$\zeta \lambda = 23,451 \text{ Jan. II}$$

$$\zeta \lambda = 26 2 18$$

$$\zeta \lambda = 17,6502$$

$$\zeta \lambda = 0,24675$$

$$\zeta \lambda = 9,70340$$

$$\zeta \lambda = 1,543,27$$

$$\zeta \lambda = 34,936$$

$$\zeta \lambda = 50,390 \text{ Jan}$$

$$\zeta \lambda = 23,454 \text{ Jan. II}$$

$$\zeta \lambda = 0,08555$$

$$\zeta \lambda = 1,4031$$

$$\zeta \lambda = 0,19'30''$$

$$\zeta \lambda = 16 39 0$$

$$\zeta \lambda = 106 47 59$$

$$\zeta \lambda = 90 08 59$$

$$\zeta \lambda = 116 11 17$$

$$\zeta \lambda = 26 2 18$$

$$\zeta \lambda = 9,16073$$

$$\zeta \lambda = 9,91445$$

$$\zeta \lambda = 0,08555$$

$$\zeta \lambda = 0,17110$$

$$\zeta \lambda = 1,4029$$

14 Febr. 7° 53' 47" m. h. Seiten $M = 67^{\circ} 45' 39.7$ Decl = $+16^{\circ} 39' 59.6$ 14,32902
 21 — 8 35 4 70 41 41,1 23 3 25,7 21,35768
 27 9 21 4 73 32 20,5 27 49 2 27,38963

$\epsilon = 23^{\circ} 27' 27.3$

$\tan 3 = \frac{\tan \delta}{\sin \alpha}$ $\tan 4 = \frac{\cos(\delta - \epsilon) \tan \alpha}{\cos \delta}$ $\tan 6 = \sin \epsilon \tan 5 (\delta - \epsilon)$
 $\epsilon = 23.2727$

14
 $\alpha = 67^{\circ} 45' 40$ $\tan 3 = 9.57800$
 $\delta = 16^{\circ} 40' 0$ $\sin \alpha = 9.96643$
 $\tan \delta = 9.47622$ $\frac{9.47622}{9.96643} = 9.50979$
 $\delta = 17^{\circ} 55' 20$
 $\epsilon = 23^{\circ} 27' 27$
 $\delta - \epsilon = -5^{\circ} 32' 7$

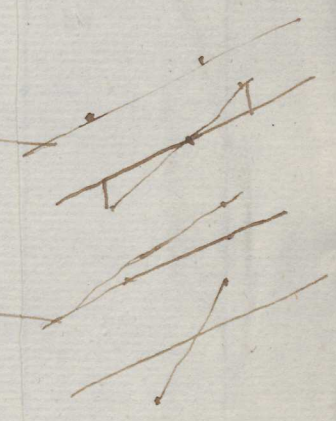
21
 $\alpha = 70^{\circ} 41' 41$ $\tan 3 = 9.51931$
 $\delta = 23^{\circ} 3' 26$ $\sin \alpha = 9.96306$
 $\tan \delta = 9.62900$ $\frac{9.62900}{9.96306} = 9.65421$
 $\delta = 24^{\circ} 16' 40$
 $\epsilon = 23^{\circ} 27' 27$
 $\delta - \epsilon = 0^{\circ} 49' 13$

27
 $\alpha = 73^{\circ} 32' 28$
 $\delta = 27^{\circ} 49' 2$
 $\tan \delta = 9.72231$
 $\sin \alpha = 9.98183$
 $\frac{9.72231}{9.98183} = 9.74048$
 $\delta = 28^{\circ} 49' 0$
 $\epsilon = 23^{\circ} 27' 27$
 $\delta - \epsilon = +5^{\circ} 21' 33$

$\cos(\delta - \epsilon) = 9.99796$
 $\tan \alpha = 0.38020$
 $\frac{0.38020}{9.99796} = 9.97810$
 $\tan 3 = 9.97810$
 $\delta = 68^{\circ} 39' 0$
 $\sin \alpha = 9.6118$
 $\frac{9.6118}{9.97810} = 9.55942$
 $\tan 4 = 9.55942$
 $\delta = 96^{\circ} 12$
 $\cos(\delta - \epsilon) = -0.90644$
 $\tan 6 = -0.95556$
 $\delta = -5^{\circ} 9' 30$
 $\sin \alpha = 328100$
 $\frac{328100}{3150} = 21.9677$

$\cos(\delta - \epsilon) = 9.99996$
 $\tan \alpha = 0.45556$
 $\frac{0.45556}{9.99996} = 9.95979$
 $\tan 3 = 9.95979$
 $\delta = 72^{\circ} 17' 20$ $\sin \alpha = 9.18310$
 $\frac{9.18310}{9.95979} = 9.999$
 $\tan 4 = 9.999$
 $\delta = 96^{\circ} 27$
 $\cos(\delta - \epsilon) = +0.15543$
 $\tan 6 = 9.65970$
 $\delta = 0^{\circ} 15' 42$
 $\delta = 0^{\circ} 13' 434$
 $\delta = 46' 50$

$\cos(\delta - \epsilon) = 9.99810$
 $\tan \alpha = 0.52956$
 $\frac{0.52956}{9.99810} = 9.74259$
 $\tan 3 = 9.74259$
 $\delta = 0.58507$
 $\delta = 75^{\circ} 25' 40$
 $\sin \alpha = 9.98580$
 $\frac{9.98580}{9.74259} = 8.97210$
 $\tan 4 = 8.97210$
 $\delta = 8.95798$
 $\delta = +5^{\circ} 11' 20$



$1,32178$
 $2,87552$
 $1,46626$
 $29,259$
 $14,329$
 $43,588$

$9 = 1,1387$
 $\log 9 = 0.05641$
 0.02020
 0.08461
 9.76019
 9.87552 \log \sin δ

160
 $v-w = 348 44 0$
 $16^{\circ} 16'$
 $11,46910$
 $10,7916$
 $1 = 0.09953$
 9.87552
 $1,18401$

~~Mars 14, 6656 m. h. Seite Perih.~~

~~14 Mars 15 40 m. h. Seite~~

$v-w = 18^{\circ} 16'$
 $12,1617$ $\delta = 1,08499$
 $9,87552$
 $1,20947$
 $16,1985$
 $27,3896$
 $43,588$

Febr $15,276$
 $27,3896$
 $42,6656$
 28
 74

6656
 $6250 - 10$
 $0,0406$
 $0,0402 - 8$
 $0,5004$

T J

$$\begin{aligned} \log \delta' &= 0.13431 \\ \log(\alpha'-\delta) &= +9.99779 \\ \hline &+ 8.13210 \quad \text{rel} + 0.01355 \end{aligned}$$

$$\begin{aligned} \log \delta &= -0.95556 \\ \log(\alpha'-\delta) &= 9.99412 \\ \hline &- 8.94960 \quad \text{rel} = -0.089060 \\ \log \text{corr. } \delta &= 9.01121 \quad \text{corr. } 0.102615 \end{aligned}$$

$$\begin{aligned} \log \delta'' &= +0.95014 \\ \log(\alpha'-\delta) &= 9.99412 \\ \hline &0.95226 \quad \text{rel.} + 0.089590 \end{aligned}$$

$$\begin{aligned} \log \delta' &= 0.13431 \\ \log(\alpha'-\delta) &= 9.98950 \\ \hline &8.12381 \quad \text{rel} + 0.013624 \\ \log \text{corr. } \delta &= 8.80062 \quad \text{corr. } 0.075966 \end{aligned}$$

$$\begin{aligned} \log \delta' &= 9.13059 \\ \log \delta' &= 9.93359 \\ \hline &9.06418 = \log M \\ &1.15926 \quad M = \end{aligned}$$

$$\begin{aligned} \log \delta'' &= 9.99612 \\ \log(\delta'-\delta) &= 9.98046 \\ \hline &9.98458 \quad \text{rel} 0.96512 \\ \log \delta &= 9.99480 \quad \text{rel} 0.98810 \end{aligned}$$

$$\log \log(\delta'-\delta) = -0.36135 \quad \text{m.} - 0.02298$$

$$\begin{aligned} \log \delta'' &= 9.99612 \\ \log(\delta'-\delta) &= 9.35609 \\ \hline &9.35301 \\ \log(\delta'-\delta) &= -0.999166 \\ \log(\delta'-\delta) &= 95^{\circ}49'10'' \\ \log \delta &= 325^{\circ}47'45'' \\ \log \delta &= 421^{\circ}36'55'' \\ \log(\delta'-\delta) &= 61^{\circ} \end{aligned}$$

$$\begin{aligned} \log \delta &= 9.99776 \\ \log \delta &= 9.35525 \\ \log(\alpha'-\delta) &= 9.99695 \quad M = 1.15926 \\ \log \delta &= 0.99300 \\ \hline &0.16626 \\ \log \log(\delta'-\delta) &= 9.22079 \\ \log \log(\delta'-\delta) &= 9.07195 = \log(\alpha'-\delta) \end{aligned}$$

$$\begin{aligned} \log(\delta'-\delta) &= 98^{\circ}51'16'' \\ \log(\delta'-\delta) &= 35^{\circ}22'10'' \\ \log \delta &= 75^{\circ}25'40'' \\ \log \delta &= 110^{\circ}47'50'' \\ \log(\delta'-\delta) &= 9.76256 \end{aligned}$$

$$\begin{aligned} \log \log \delta &= 9.30939 \\ \log \delta &= 0.06418 \\ \log \delta &= 8.95014 \\ \hline &9.02232 \quad \text{rel} 0.10527 \\ \log \delta &= -0.95556 \quad \text{rel} -0.09027 \\ \log \delta &= +9.29124 \quad \text{rel} +0.19554 \\ \log \delta &= 9.98185 \quad \log \delta = 9.84022 \\ \log \delta &= 43^{\circ}40'10'' \quad \log \delta = 9.45102 \end{aligned}$$

$$\begin{aligned} 421 \\ \log \delta &= 61^{\circ}36'55'' \\ \log \delta &= 110^{\circ}47'50'' \\ \log \delta &= 310^{\circ}49'5'' \\ \log \delta &= 2.05037 \\ \log(\delta'-\delta) &= +9.81534 \\ \log \delta &= 9.67371 \\ \log \delta &= 61^{\circ}51'10'' \end{aligned}$$

$$\begin{aligned} \log \delta &= 9.99824 \\ \log(\delta'-\delta) &= -9.34726 \\ \log \delta &= -9.34550 \\ \hline &+ 102^{\circ}40'0'' \end{aligned}$$

$$\begin{aligned} \log \delta &= 9.35525 \\ \log \delta &= 9.94534 \\ \log \delta &= 9.30059 \\ \log \delta &= 8.60118 \end{aligned}$$

$$\begin{aligned} \log \delta &= 9.99400 \\ \log \delta &= 9.98907 \\ \log \delta &= 9.98387 \\ \log \delta &= 9.96774 \\ \log \delta &= 0.92841 \end{aligned}$$

$$\begin{aligned} \log \delta &= 9.45102 \\ \log \delta &= 9.99824 \\ \log \delta &= 9.44926 \end{aligned}$$

$$\begin{aligned} \log \delta &= 9.35525 \\ \log \delta &= 9.67371 \\ \hline &9.02896 \\ \text{rel.} &+ 0.106896 \end{aligned}$$

$$\begin{aligned} \log \delta &= 9.44926 \\ \log \delta &= 9.99480 \\ \log \delta &= -9.34550 \\ \log \delta &= -8.78956 \\ \log \delta &= -0.061597 \\ \log \delta &= +0.168493 \end{aligned}$$

$$\begin{aligned} \log \delta'' &= 9.99822 \\ \log(\delta'-\delta) &= -9.05293 \\ \log \delta'' &= -9.05115 \\ \log \delta'' &= 9.62730 \end{aligned}$$

$$\begin{aligned} \log \delta'' &= 9.03999 \\ \log \delta'' &= 9.99612 \\ \log \delta'' &= 9.99724 \end{aligned}$$

$$\begin{aligned} \log \delta'' &= 9.99336 \\ \log \delta'' &= 9.98672 \\ \log \delta'' &= 0.96980 \end{aligned}$$

$$\begin{aligned} \log \delta &= 9.45102 \\ \log \delta &= 9.99822 \\ \log \delta &= 9.44924 \\ \log \delta &= 0.06418 \\ \log \delta &= 9.38506 \end{aligned}$$

$$\begin{aligned} \log \delta &= \\ \log \delta &= \\ \text{rel.} &+ 0.106896 \end{aligned}$$

$$\begin{aligned} \log \delta &= 9.38506 \\ \log \delta &= 9.99612 \\ \log \delta &= -9.05115 \\ \log \delta &= -8.43233 \\ \log \delta &= -0.027060 \\ \log \delta &= +0.133956 \end{aligned}$$



κ 0

$$\kappa = 1,5125 \quad \kappa'' = 1,5553$$

$$\rho = \quad \rho'' =$$

$$\delta\kappa = 111^{\circ} 21' 1'' \quad i = 46^{\circ} 33' 10'' \quad \Pi 92 29 50$$

$$l.g = 0,14270 \quad \text{Dooj. } 26,311^{\circ} \text{ Jan.}$$

$$A = +29 36 54 \quad L a = -9,86431$$

$$B = +121 15 40 \quad L b = +9,99920$$

$$C = +33 12 35 \quad L c = +9,83053$$

$$\alpha = 70^{\circ} 36' 35''$$

$$\delta = 23 5 40$$

$$\sin(\lambda - \delta) = \frac{\tan \beta}{\tan \beta'' - \tan \beta \cos(\lambda'' - \lambda)}$$

$$\lambda'' - \lambda = 120^{\circ} 46' 46'' \quad \tan(\lambda'' - \lambda)$$

$$\sin \lambda = -0,60211 \approx \sin(\lambda - \delta)$$

$$\sin \lambda'' = +0,60230 \quad \mu \lambda = +0,040022$$

$$\sin(\lambda'' - \lambda) = \frac{9,98910}{-0,59125} \quad \mu \lambda = -0,039017$$

$$\sin(\lambda'' - \lambda) = \frac{8,89784}{9,34482} \quad \mu \lambda = +0,079099$$

$$\frac{9,55302}{-9,04913} = \sin(\lambda - \delta)$$
$$\frac{9,55302}{-9,04913} = \sin(\lambda - \delta)$$

$$\sin(\lambda - \delta) = \frac{9,00684}{9,59531} \quad i = 21^{\circ} 29' 50''$$

$$\lambda - \delta = -6^{\circ} 23' 20''$$

$$\sin(\lambda - \delta) = \frac{-9,04640}{9,55575} \quad i = 19^{\circ} 16' 30''$$

$$\lambda - \delta = -6^{\circ} 23' 20''$$
$$\lambda = 120^{\circ} 11' 45''$$
$$\delta = 114^{\circ} 21' 55''$$
$$\delta = 126^{\circ} 35' 7''$$

$$\lambda = 120^{\circ} 11' 45'' \quad \lambda'' = 132^{\circ} 58' 21''$$
$$\delta = 126^{\circ} 35' 7'' \quad \delta = 126^{\circ} 35' 7''$$
$$\lambda - \delta = -6^{\circ} 23' 20'' \quad \lambda'' - \delta = +6^{\circ} 23' 16''$$

$$\sin(\lambda - \delta) = -9,04911 \quad \sin(\lambda'' - \delta) = 19,04911$$
$$\cos i = 9,97360 \quad \cos i = 9,97360$$

$$\cos u = 9,07551$$
$$u = -6^{\circ} 47' 10'' \quad u'' = +6^{\circ} 47' 10''$$
$$u = -6^{\circ} 47' 10''$$
$$\sin(u'' - u) = 6^{\circ} 47' 10''$$

$$\sqrt{r} = 0,04514 \quad \sqrt{r''} = 0,03371$$
$$\frac{1}{\sqrt{r}} = 9,95486$$

$$\cos(u'' - u) = 0,92446 \quad \sin(u'' - u) = 9,07248$$
$$\sqrt{r} = 0,04514 \quad \sqrt{r''} = 0,03371$$
$$\frac{0,87932}{7,5739} \quad \frac{9,10619}{0,89381}$$
$$\frac{7,0309}{-0,2570} \quad \frac{9,40993}{9,95486}$$

$$u + \delta - \pi = -15^{\circ} 55' 0''$$
$$i = -9,43813$$

$$u + \delta - \pi = -31^{\circ} 50' \quad 9,97100$$
$$u = -6^{\circ} 47' 10'' \quad 9,97100$$
$$\delta - \pi = -25^{\circ} 25' \quad 0,02020$$
$$\delta = 126^{\circ} 35' 7'' \quad 9,05640$$
$$151^{\circ} 37' 55'' \quad 9 = 1,1387$$

Koncert van de Vico 1846

Febr. 14, 329 02 m. l. Luidr. $A = 67^{\circ} 45' 40''$ $Duylt = +16^{\circ} 49'$

21, 357 68
27, 389 63

70 41 41
73 ~~73~~ 20

398 - 5/3

3.7 $\frac{5}{10}$
 $\frac{21}{107}$
 $\frac{14}{121}$
118" 1'46"

- 43 - 48
58.12 29 22
 $\frac{110}{59.20}$ 20 14

16 55 1/2 19 17 7/6 25.9
15 115.1 | 30.4
21.4 25 77.7
28 24 6
17
120 7 40 2

24 / 40.70
 $\frac{2100}{2470}$ | 101" = 1 mm
34

12 / 101 | 9.4
 $\frac{46}{50}$

114

26
26
60 / $\frac{206}{240}$ | 4' 46"
46

$\frac{5}{2}$ 2.5

305
30
275

met toen hielden g'neem staptte wterende een meth bezij
de minig getfa! day, later a d'oplaer juist mit de
nawenn k'opyste k'opellbode eye, men it meest een o'oplaer
o'opene for i m'ulpe but k'ant o'ostig get at w'ent'ered
m'ost'le d'om sp'alle te k'ere k'ant'edje a d'om k'alle
te k'ere met wa'op'rom. I'ne o'op'ing m'igt in my
met e'g'ne o'ogen a d' w'ent'ered of k'ant o'ost'igje.

Denarkeg voor den Hoogelander
Heer Prof. J. de Vries,
deser zegen vrom J. Baizer

In staat 199 een woord over den 2e
meer vermelden als bij de vorige proefden verduidelijkt.
Maar in een zijn als bij de vorige maar de ten twee
lijft ingewonen met de uitkomst van de vorige en de voor
keerde van uitkomst van de vorige maar de ten twee
sinnig ~~gebleven~~ ^{bliffen ju} ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}
~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}
en de vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}
en de vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}

Geoordeeld zijn verduidelijkt en de vorige
by ons is een doodslag verduidelijkt; ~~en de vorige~~ ^{en de vorige}
soort van de vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}

De vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}
by ons is een doodslag verduidelijkt; ~~en de vorige~~ ^{en de vorige}
soort van de vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}

De vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}
by ons is een doodslag verduidelijkt; ~~en de vorige~~ ^{en de vorige}
soort van de vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}

De vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}
by ons is een doodslag verduidelijkt; ~~en de vorige~~ ^{en de vorige}
soort van de vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}

De vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}
by ons is een doodslag verduidelijkt; ~~en de vorige~~ ^{en de vorige}
soort van de vorige ~~en de vorige~~ ^{en de vorige} ~~en de vorige~~ ^{en de vorige}