Obliq. 12 [illegible] 23°. 55'
[illegible] 129.

m = 23''

[illegible] 23°. 4[illegible] = 30'' [illegible]

[illegible] 50'' = 23. 55

Long. of Spica in 1750 .... 6. 20. 21
Ded .... 6. — —

Origin of Hind. Zod. in 1750 — 20. 21

Precession for Parasara + — 23. 20

43°. 41'

Which at 50'' a year gives
3145 years from Parasara to 1750 }

3145 — 1750 = 1395 years B.C. when Parasara lived. — 3145 + 39 = 3194 years from Parasara to 1789 instead of 2970 as computed by Sir W. Jones
3194 — 2970 = 224 years Sir W.'s error. —

For 2627 years before the commencement of A.D 1690 the obliq. of the Ecliptick by [illegible] tables will be 23°. 48. 54 —

1750
1690
60. 2627
60.
2687 = before 1750.

When Surya [illegible] of [illegible] 5° —

21°. [illegible] { Dhurrum Sastra — four degrees [illegible] to that as [illegible] of [illegible] 9°

[illegible] Puran when [illegible] of [illegible] 3°

Lat. of Gour 24°. 53
from Burrow.

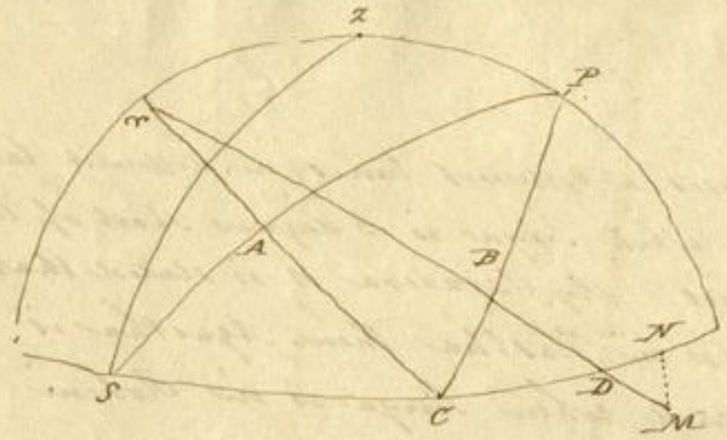
At Gour when [illegible] of [illegible] — [illegible] of [illegible]. 7°

Agastha rises at different times in different latitudes
At Ougein when Surya is 5 degrees West of Canya
Agastha rises. By Parasara it is stated that "when
"Surya Agastha is in Hastha then Agastha is seen by
"mortals. and when Surya is in Rohini Agastha
"sets or disappears.-

To explain this passage of Parasara enquiry
must first be made at what time of the year
Canopus rises now* at Ougein. The data are

1st The arc of vision which for Canopus may be taken at		10°.— "
2nd The present long. of Canopus is 1750. —		3. 11. 30. 39
3d The declination of D°. —		52. 34. 4
4th The right ascension		94. 36.
5. The ascensional difference		
6. The latitude of Ougein — (from Hunter)		23°. 11 N.

(* To save the trouble of computing the Right ascension and Declination for the present time I have taken the data out of the Tables for the year 1750.)



Given PZ = ACS = 66°. 49′ the Latitude of Cayenne
AS = 52°. 34′. 4 — the declination
to find AC. the ascensional diffs.

Sang. ACS =	66°. 49′,	10. 3632963
Sang. AS. =	52°. 34′.	10 1160662
		10. —
Rad.		
Sine AC	34°. 1′ —	9. 7477699

This added to the right ascension gives the point
of the Equator C rising with Canopus —
94°. 35′ + 34. 1 = 128°. 37′ = ♈C.

Required next the corresponding point of the
Ecliptick D, rising with S and C. first there is
in the right angled triangle ♈BC, right angled
at C, given ♈C and the angle ♈ = obliquity of
the Ecliptick, to find ♈B, but ♈C being more
than a quadrant take its complement to the next
Equinoctial point (180 — 128. 37 =) 51. 23′ and in the
Supplimentary triangle C♎B now be given C♎
= 51. 23′ and the angle ♎ = 23. 28′ to find B♎

Cosine ♎	23°. 28′	9. 9625076
		10. —
Rad —		
Tang. C♎	51°. 23′	10. 0975805
Tang. B♎	59°. 46′	10. 1350729

This taken from a semicircle (♈♎) leaves ♈B = 126°. 14′
the point of the Ecliptick B & the Longitude of that
point & the Equator (C) which rises with Canopus.
Next for BD the remaining portion of the Ecliptick
to be found. There is given the angle C equal to
the elevation of the pole 23°. 11′, the arc of declination
BC may be discovered and likewise the angle CBD
Whence in the oblique triangle BDC the side
BD may be found —

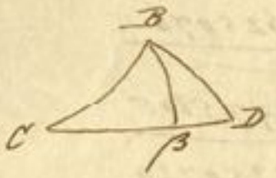
			— 10. —
Rad.			
Sine C	♎	51°. 23′,	9. 9420395
Tang	♎	23°. 28′,	9. 6376106
Tang BC		18°. 44′	9. 5304501

Rad ——— 10. ———

Sine ⏜ 23° 28′ 9. 6001101

Cosine C ⏜ 51 23 9. 7452590

Cosine CB ⏜ } 75° 37′ 9. 3953771
or CBD



Rad ——— 10. ———

Cosine BC 18° 44′ ~~9. 9763608~~

Tang C 23° 11′ 9. 6317037

Cotang CBβ ~~67° 49′~~ 67° 55′ ~~9. 6080645~~ ~~9. 6082778~~

~~7° 44′~~ 7° 42′

Whence βBD is known (75° 37′ − 67° 55′ =)

Cosine βBD − 7° 42′ 9. 9960663

Cosine CBβ 67° 55′ 9. 5751356

Tang CB 18° 44′ 9. 5303661

19. 1055017

Tang. BD 7° 20′ 9. 1094354

BD added to ♈B gives the long. of the point D coincident with the star at S and west of the point of the Equator C. 126. 14 + 7. 20 = 135° 34′

Next to find the horizontal of the ecliptic to depressed 10° below the horizon with the Sun at M. There is given MN = 10° one side of the right angled triangle DNM

and the angle MDN being equal to CDB is also formed.

Rad. ——— 10. ———

Cosine BD 7° 26′ 9. 9964330

Tang. βBD 7° 42′ 9. 1309937

Cotang βDB = 82° 22′ 9. 1274267
or CDB

Sine NDM = CDB 82° 22′ 9. 9961343

Sine MN 10° ——— 9. 2396702

Rad. ——— 10. ———

Sine DM 10° 5′ 9. 2435359

Hence ♈ 126° 14′ + 7° 20′ + 10° 5′ = 143° 35′ } the long. of
♈B + BD + DM = ♈M } the Sun when Canopus rose heliacally at
Eugeia in 1757 A.D.—

(At Benares Canopus rises heliacally about the
19th August. Nine Hindus long on the 3 Bhadon
or 21 August.

Next to find how Canopus rose at Eugenia
at the time Parasera is supposed to have
lived. — From that time to A D 1709 — 3073 years
1750
39 39
* From that time to A D 1750 is — 3034

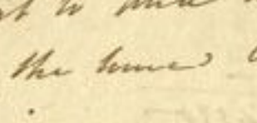
* Herschel's 3145 years.

Precession 50″ each year is 42°. 8′. 20″

Long. of Canopus in 1750 ♋ 3. 11°. 30′. 39″
1. 42. 8. 20
Long. in Parasera's time ♋ 1. 29. 22. 19
75° 51′. 20″

Lat. ——

First find the Right Ascension — (75° —
Declination (53°. 15′



Rad. 10. ——
Sine long. 59°. 22′ 9. 9347235
Co tang. lat. 75. 51. 9. 4173265
Co tang BAC 77. 19 9. 3520500
BAC 77. 19 − 23. 28 = 53. 51 CAD

Rad. 10. ——
Cosine long 59°. 22′ 9. 7071801
Cosine lat 75. 51 9. 3882101
Cosine AC 82. 51 9. 0953902

Rad. 10. ——
Cosine CAD 53. 51 9. 7707793
Tang AC 82. 51 10. 9015540
Tang. R^t Ascension 78°. — 10. 6723333

Rad. 10. ——
Sine CAD 53. 51 9. 9071293
Sine AC 82. 51. 9. 9966096
Sine Declination 53°. 15′ 9. 9037389

Given ♈ = ACS = 66. 49 the co Lat of Eugenia.
AS = 53. 15 the declination
♈A = 78° — the R^t Ascension

Sine AC the ascensional difference &c. —

Tang. ACS = 66°. 49′ 10. 3682963
Tang AS = 53°. 15′ 10. 1268332
Rad — 10. ——
Sine AC — 35°. — 9. 7585369

Cosine ♋ 23°. 28′ — 9. 9625076
Rad. 10. ——
Tang. C ♎ 67° — 10. 3721481.
Tang B ♎ 68. 43 10. 4096405

R^t ascen. 78° + 35° = 113°. = ♈C
180° − 113° = 67° = C ♎

180° − 68°. 43′ = 111°. 17′ = ♈B

Rad. 10. ——
Sine C ♎ 67°. 9. 9640261
Tang ♎ 23. 28 9. 6376106
Tang BC 38. 34 9. 9016367

Rad. 10. ——
Sine ♎ 23. 28 9. 6001101
Cosine C ♎ 67° — 9. 5918780
Cosine CB ♎ } 81. 3′ 9. 1919961
or CBD

Rad. 10. ——
Cosine BC 38. 34 9. 993 1419
Tang. C 23. 11 — 9. 6317037
Co tang CBβ 71. 29 9. 5248456
CBD − CBβ
81°. 3 − 71. 29 = 9°. 34 = βBD

Cosine βBD 9°. 34′ 9. 9939170
Cosine CBβ 71. 29 9. 5018538
Tang. CB 38. 34′ 9. 9016422
Tang BD 14°. 24′ 19. 4034960
9. 4095702

♈B + BD
111. 17 + 14. 24 = 125. 41 = ♈D

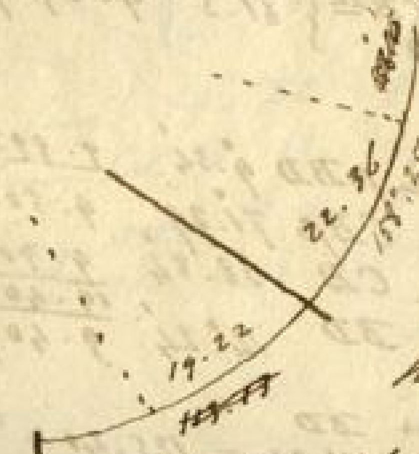
For the arc of the Ecliptick depressed below the horizon.

Rad.	10. ——	Sine CDB 80.44	9.9942950
Cosine BD 14°.24′	9.9861369	Sine MN 10°.	9.2396702
Tang βBD 9°.34′	9.2267004	Rad.	10. ——
~~[illegible]~~ Cotang βDB, or CDB 80°.44′	9.2128373	Sine DM 10°.8.	9.2453752
			~~9.2339652~~

♈B = 111.17
BD = 14.24
DM = 10.8
♈M = 135°.49′

2y. point of the Hindu Ecliptick corresponding with this long.

Precession 42. 8 —
Ayanansa 19. 22
Vernal equinox in Parasaras time 22. 36



135. 49
22. 36
~~[illegible]~~,
158°. 25

Point of the Hindu Ecliptick }

Uttaraphalguni is the 12th Nacshatra and Hasta is the 13th —

13°.20′ × 12 = 160° —

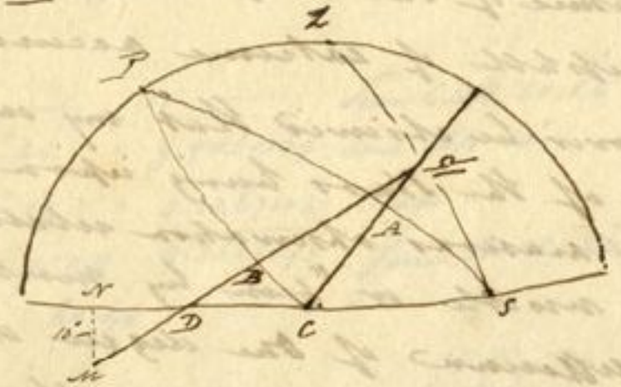
160 —
158.25,
1°.35′

Hence it appears that Canopus rose heliacally at Oujeine 3073 years ago when the sun was within 1°.35′ of entering Hasta — which coincides with

the Hindu account as nearly as can be expected from the nature of the subject which certainly is not susceptible of extreme accuracy. —

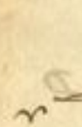
It may moreover be observed that my calculation is for the time of the Stars being upon the horizon and that Parasaras observation relates to the Stars being visible or "seen by mortals", and that the difference of one degree or one day ~~may~~ is no more than a reasonable allowance to be made on that account.

Of how Canopus set heliacally in Parasceue time. —



Right ascension of Canopus — 78°
Equat. diff. 35
Oblique ascension 43°
180 − 43 = 137° = ♎C

We have now ♎C 137°. and angle ♎ = 28°.28 to find ♎B but ♎C being more than a quadrant take its comp. to next equinoctial point 180 − 137 = 43°
and in the supplemental triangle B.rC now be,
given Cr = 43°. and the angle r = 23.28



To find Br

	Cosine r 23.28	10. —	9.9625076
Rad.			
Tang.	Cr 43°		9.9696559
Tang.	Br 45.24	10.	9.0071483

This value from a semicircle (r♎) leaves ♎B = 134.32
the point of the Ecliptic B which corresponds with the point of the Equator C. which sets with Canopus next for BD — Then is given the angle C 23.11 the arc of Declination BC may be discovered and likewise the angle CBD Whence in the oblique triangle BDC the side BD may be found.

Rad.		10. —	Rad.		10. —
Sine	Cr 43°	9.8337853	Sine r 23.28		9.6001101
Tang	♎ 23.28	9.6376101	Cosine Cr 43°		9.9641275
Tang	BC 16.29	9.4713939	Cosine CBr = CBD	75.4	9.4642456

Rad 10.—

~~Ad cosine eq. ...~~

Cosine BC 16°.29 9.9817744 ~~...~~

Tang. C 23.11 9.6317037

Cotang CBβ ~~...~~ 67°.40' ~~...~~ 9.6134781

Whence βBD is known

(73°.4' − 67°.40' = 6°.24'

Cosine βBD 6°.24' 9.9972850

9.5797772

Cosine CBβ 67°.40' 9.4711407

Tang CB 16°.29' 19.0509179

Tang BD 6°.27' 9.0536329

BD added to ♎B gives the point D ascending with the Star S and with the point C the Equator C —

$$\text{♎B } 134.32 + \text{BD } 6°.27' = 140.59 = \text{♎D}$$

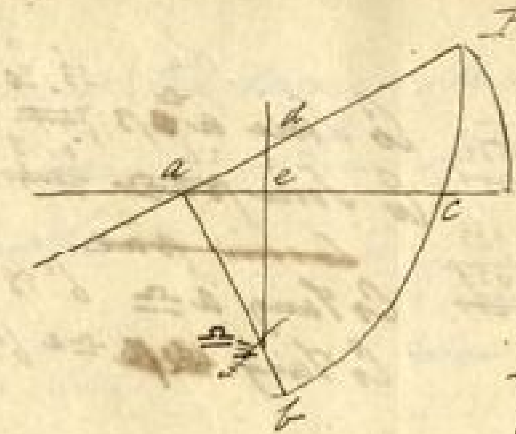
and DM may be taken as before

$$\text{♎D} = 140.59$$
$$\text{DM} \quad 10.49$$
$$151.7 = \text{♎M}$$

This taken from a semicircle leaves the long. of M 180 − 151.7 = 28°.53' long. of the Sun when Canopus set heliacally

28.53
22.36
51.39 long in Parasaras Ecliptic

(13.20 × 3 = 40°) which corresponds with 11°.39' of Rohini the 4th nacshatra



η Ursae 1750 long. 5. 23° 24'. 33"
Lat 54. 23. 45

Rt. ascension 204. 25. —
Declin — 50. 34. 11

Tang Co Lat. 66.49 10.3682963
Tang. cb = Declin. 50.34 10.0849253
Rad. 10
Sine ab. ascen. diff. 31°.23 9.7166290

~~...~~

♈b − ♈♎ = ♎b
204.25 − 180 = 24°.25'

ab. ♎b.
31.23 − 24.25 = 6°.58'

Qy. How η of the great bear rose in 1750. —

c – the Star
♈b – its right ascension
cb – Declination
ab – ascensional diff

In the rt angled triangle a♎d, a♎ being known with the angle ♎, ad may be found — and also the angle d, and the side ♎d
and
In the oblique triangle ade, the angle a = latitude the angle d and the side ad, de may be found
and
180° − ♎d + de = ~~...~~ point of the ecliptick rising with the Star.

Or

In the oblique triangle ♎ac, ♎a, a♎c and ♎ac (= co. lat being known ♎c may be found and 180° (= ♈♎) − ♎c = ♈c, the point of the ecliptick required.


Rad
Cosine a♎ 6°.59
Tang. a = co Lat. 66.49
Co Tang a♈β 23.20

10.—
9.9967682
10.3632963
10.3650625

~~a♈♎ + a♈β = β♈♎~~

a♈β + Tang β♎ = β♈♎
1st = 23.20
2nd = 0.8

Cosine a♎
Tang ♎ a♎ Rad —

173. 36
20. 21 Aquarius.
153. 15 Long. Hindu
13.20 × 11 146. 40
6. 35 of the 12th Nacshatra

Co Sine a♈β 23.20
Co Sine β♎ 0.8
~~Cosine βae~~
Co Tang a♎ 6°.58
Co Tang ♎e 6°.24

9.9629449
9.9999988
10.9129499
20.9129487
10.9500038

♈♎ – ♎e ♈e
180° – 6°.24 = 173°.36 } the point of the
174.— } Ecliptick rising
By the Globe with ♈ —

173. 36
19. 21
154. 15 Long. in the Hindu Ecliptick

13.20 × 11 = 146.40
7.35 of the 12th Nacshatra
or
Uttra Phalgune

Magha is the 10th —

27. next how the same star rose at Oujein at the time when it is said Judishter flourished.

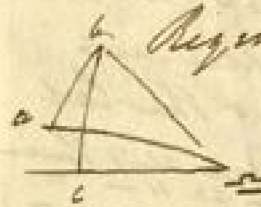
A. D Cal. Y.
1750 = 4851.

"I find how long ago since ~~the~~ Judishter flourished was 2526 to the Saca year expired. the Saca began in the 3179 of the Cal. Yug.
3179 – 2526 = 653 Cal. Y. when Judishter flourished.
4851 – 653 = 4198 years from that period to 1750.

Precession 8'.23".4''' for 10 years
10 : 8'.23".4''' :: 4198 : 58°.39'.17".13'''

Long. of ♈ in 1750 = 173. 24. 33
Long. in C.Y. 653 = 114. 45. 16
Lat. 54. 23. 45 N

Required the Right ascension and Declination



~~180 – 173. 24. 33 = 6. 35. 27~~
180 – 114. 45. 16 = 65. 14. 44

Rad
Sine ♎a 6°.35.27
Cotang Lat 54°.23.45
Cotang ♎ab 85°.18

10.—
9.0594672
9.8548704
8.9143376

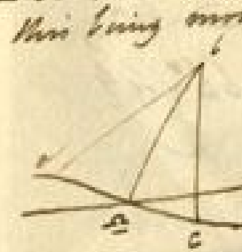
♎ab + 23°.38 = b♎c = 109°.16
this being more than a quadrant,
180 – 109.16 = 70°.32

Rad
~~Cosine ♎a 6.35.27~~
Cosine Lat 54.23.45
Cosine Hyp. ♎b 54°.39

10.—
9.9971260
9.7651911
9.7623179

Rad ~~Cosine ♎b~~
Cosine 70.32
Tang 54.39
Tang. R. Ascen } 25°.10 / 180 / 205.10
205.10 —

10
9.5227811
10.1491392
9.6719203



Rad
Sine 70.32
Sine Hyp 54.39
Sine Declin 50°.9

10.
9.9744359
9.9114948
9.8859307

Rad. 10.

Sine = a 65°.14.44 9.9501543

Cotang Lat 54.23.45 9.9544704

Cotang = ab 56.58 9.8130247

56.58 + 24 = 80.58

Rad. 10.

Cosine = a ~~80.58~~ 65.14.44 9.6221357

Cosine Lat 54.23.45 9.7651911

Cosine Hyp. 75.53 9.3873262

Rad. 10.

Cosine 80.58 9.2016557

Tang — 75.32 10.5883854

Tang. Hyp.

Tang. Ast. arcum (31.36) 9.7890512

180 − 31.36 = 148.24 Ast. arcum

Rad 10.

~~Cosine~~ Sine 80.58 9.9445740

Sine Hyp. 75.32 9.9460069

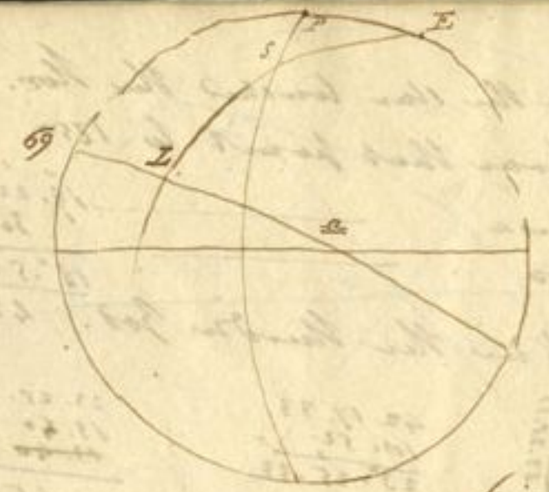
Sine Dulin 73.— 9.9805867

90 − 73 = 17. dist. from the pole, and the Lat of the point being 23.11 the star would not ascend below the horizon of Eugenia

Its declin. in 1750 was 50.34.11 the complement being 39.25.49 & the Lat of Eugenia 23.11 the star did then ascend (50.34.11 − 39.25.49 = 23.11 −) 11.9.22 below the horizon

16.14.49

Beyond next the period when the star would touch the horizon of Eugenia or when its declination ~~was~~ was 66.49



Given

PE = 23.30 = obliquity

SP = comp. Dulin = 23.11

SE = comp. Lat = 35.37

Wanted SPE = 69L and

γ 69 + 69L = long req.

SE = 35.37

SP = 23.11

PE = 23.30 obliq.

82.17

half 41.8.30

SP 23.11

Diff. 17.47.30

Sine SE 9.7651911 0.2348089

Sine PE 9.5977827 0.4022173

Sine 41.8. —— 9.4101020

Sine 17.47 — 9.4043951

19.9465141

9.9732571

9.9732571

Long. in 1750. 174.23.33

Long. when it touched the Hor. of Eugenine 132.6.—

42.17.33

Cosine 21.3

21.3

42.6

γ 69 = 90

132.6 Long. req.

which at 50" p. ann. gives the interval = 3045 years between A.D. 1750 and the period when the star only touched the Hor. of Eugenie

The Long. when the star touched the Hor. = 132°.6

Precession from that point to 1750 = 42.17.33

Hindu Ayanamsa 19.22 / 30

Ded for 1750 18°.52

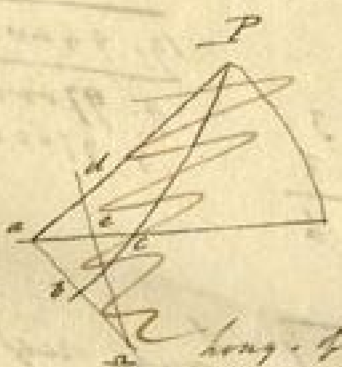
Count back in the Hindu Zod. 42°.17.33 from 1750.

42.17.33
18.52
23°.25.33

23.25.33
13.20
~~13.40~~
9.45.33 = Bharani asvini
Long ~~...~~ of the stars Hindu

Qy. In the lat. of Oujein what point of the Ecliptic (e) rose when γ touched the Horizon (c) its

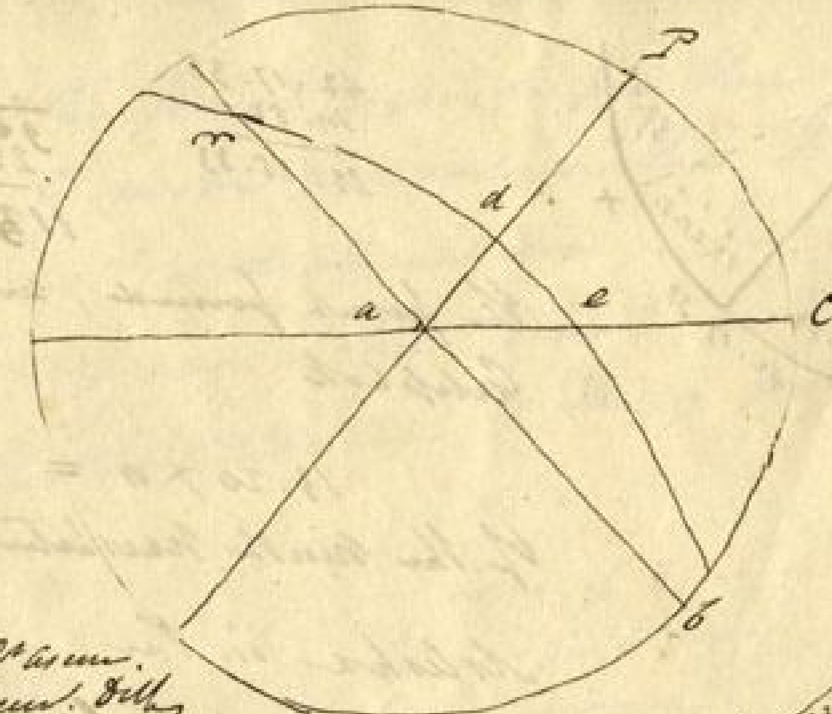
Declination then being	66°.49
Right ascension γb	169°.31
Long.	132.6
γ Lat. (N)	54.23.45
Lat. of Oujein (N)	23°.11

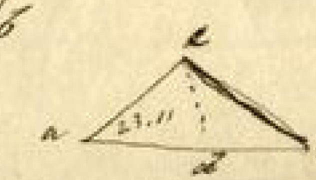


In this case the ascens. Diff is 90°.

Long. of γ in 1750		174.23.33
add Ayanamsa		20.21.
Long in the Hind. Ecliptic		194.02.33
Deduct precession since it touched the Horizon		42.17.33
	111.45	~~151.45~~
Long. Hindu when it touched the Hor. =	106.40	140.40
13.20 × 8 = Nacshatras	5.5	5.47

γ rose then with 5°.47 of the 9th Nacshatra





γb = 169.31 Rt ascen.

ab = 90 − ascens. Diff.

γa = 79.31 Qy − γe

Cos. γ 23.30	9.9623974
Rad.	10.
Tang. γa 79.31	10.7327387
Tang. γd 80.21	10.7693409

Rad.	10.
Sine γa 79.31	9.9926095
Tang. γ 23.30	9.6383019
Tang. ad 23°.9	9.6309114

Rad.	10
Sine γ 23.30	9.6006997
Cosine γa 79.31	9.2599509
	~~9.5...~~
Cosine γda 85.10	8.8606506

180° − γda 85.10 = ade 94.50

Rad.	10.
Cosine ad 23.9	9.9635417
Tang a 23.11	9.6317037
Cotang acd 68.30	~~9.9269...~~ 9.5952454

acd 94.50 − acd 68.30 = dcb = 26.20

Cosine dcb 26.20	9.9524188
Cosine acd 68.30	9.5640754
Tang ac 23.9	9.6310037
Tang bc 9°.52	9.1950866
= de 9°.42	9.2325618

γd + de = γe

80.21 + 9°.42 = 90°.3 Long. ♉

of the point of the Ecliptic e which rose when the star touched the Horizon

42.17.33
10.52
23.25.33

~~90.26~~
90.3
23.25.33
113.28.33 Long. L

The point found, in the Hindu Ecliptic

13.20 × 8 = 106.40

Of the ninth Nacshatra 6.11.33

Aslesha is the 9th Nacshatra

Megha in which the stars at a said to have been, is the ~~tenth~~ 10th Nacshatra.

According to the Vishnu Puran, the Cali Yug began when the seven Rishis were in the Nacshatra Megha (the 10th). This was at the close of Judishters reign. ~~when~~ Judishter then ascended to heaven with Crishna leaving the charge administration to Prurcheet

Ly. next the period requisite for the point c to move forward in the Hindu Ecliptic 13°.20 = a Nacshatra. The Hindu account represents the period just 100 years in Judishters time. This is just 8 minutes

in years

Long. of ♌ — 152.6
Increase for 100 years — 1.23.20
153.29.20
Long. — 54.23.45
Lat. —

100
153.29.20
46.30.40

Rad.
Sine 46°.30.40
Co. Tang. Lat 54.23.45
Cotang. ~~47.28~~ 62.33

47.33
~~4.0~~ obl. 23.30
70.58
85.03
86.3

10.
9.8605622
9.0548704
~~9.7651911~~
~~9.6057534~~
9.7154326

Rad.
Cosine 46.30.40
Cosine Lat. 54.23.45
Cosine Hyp. 65.22 —

10.
9.0378122
9.7651911
9.6030033

Rad —
Cosine ~~70.58~~ 85.33
Tang. ~~66.22~~ 66.22
Tang. Rt Ascens. 10°.3' ~~10.8~~
~~180 — 10.8~~ = ~~169.52~~
180 — 10.3 169.57

Rad
Sine ~~70.58~~ 85.33
Sine 66.22
Sine Declin. ~~66.8~~
65.58 ~~66.8~~

10.
~~8.8898007~~
~~8.5143718~~
~~10.3543803~~
~~10.3622894~~
~~9.8757644~~
~~9.2321901~~
9.2487410
9.9986888
~~9.8750890~~
~~9.9619567~~
~~9.9606457~~
~~9.8380908~~
9.9611864

Right Ascen. ~~169.52~~ 169.57
Declination 65.58 ~~66.8~~ N

~~66.49~~
66.
.40 diffs

66.49
65.58
.51

Tang. Co Lat. Oujein 66.49 — 10.3602963
Tang. Declin. 66.11 — ~~10.3541425~~ 10.3507372
Rad. — 10
Sine Ascen.l Diff ~~75.27~~ 73.49 — ~~9.9...~~ 9.9824409

Rt Ascen 169.52
Ascen. Diff ~~70.27~~ 73.49
094.25, 96.3
Oblique Ascen = ♈a
180 − 96.3 = 83.57 = ♎a

Cosine ♈ 23.30 — 9.9623971
Rad — 10.
Tang ~~♈a 94.25~~ ♎a 85.35 83.57 — ~~11.1121666~~ 10.9747490
Tang ♈d ♎d 85.27 84.27 — ~~11.1497688~~ 11.0123512

Rad — 10
Cosine ad ~~23.27~~ 23.23 — ~~9.9...~~ 9.9627012
Tang a 23.11 — 9.9634336
Co Tang adδ ~~49.52~~ 49.51 — ~~9.9259960~~ 9.9262148

eda − adδ = δde
~~88.14 − 49.52 = 38.22~~
87.35 − 49.51 = 37.44

Rad. — 10.
Sine ♎a ~~85.35~~ 83.57 — ~~9.9987375~~ 9.9975743
Tang. 23.30 — 9.6383019
Tang ad ~~23.27~~ 23.23 — ~~9.6370394~~ 9.6358762

Cosine δde ~~38.22~~ 37.44 — 9.8971030
Cosine ade ~~88.14~~ 87.35
Tang. ad ~~23.27~~ 23.23
Tang. δe ~~0.59~~ 1.19 — 8.3627405

Rad. — 10.
Sine 23.30 — 9.6006997
Cosine ♎a ~~85.35~~ 83.57 — 9.0224254
Cosine ♎da ~~88.14~~ 87.35 = eda — 8.6235251

♈♎ − ♎d = ♈d
180 − ~~85.57~~ = 94.3
180 − 84.27 = 95.23
♈d + de = ♈e
~~94.3 + 59~~
95.23 + 1.19 = 96.42 Long. of the point of the Ecliptic rising with the star, which in the first 100 years has moved onward 1°.16′ ~~[illegible]~~ and arrived at ~~10.24.13~~ 12. 4.13 of Aslesha or near the beginning of Megha

96.42
89.26
7.16

Long. Hindu = 95.2.13 / 22.2.13 / 117.4.13

Qy. What was the motion of the point e in the next 100 years.

180.
134.53.40
45.6.20

Long. — 133.29.20
Increase for 100 years — 1.23.20
134.53.40
Long.
Lat. — 54.23.45

Rad — 10.
Sine 45.6.10 — 9.8502417
Co Tang. Lat 54.23.45 — 9.8548704
9.7051121
Co Tang. 63.6.0
23.30 add
86.36

Tang. Co Lat. Oujein 66.49 — 10.3602963
Tang. Declin. 64.25 — 10.3190102
Rad. — 10.
Sine Ascen. diff 63.26 — 9.9515839

Rt Ascen 173.16
Ascen. Diff 63.26
Oblique Ascen. 109.50 = ♈a
180 − 109.50 = 70.10 = ♎a

Rad. — 10.
Cosine 45.6.10 — 9.8487257
Cosine Lat 54.23.45 — 9.7651911
Cosine Hyp. 64.38 65.44 — 9.6139168

Cosine ♈ 23.30 — 9.9623971
Rad — 10.4428746
Tang ♎a 70.10
Tang ♎d 68.40 — 10.4804800

Rad. — 10.
Cosine 86.36 — 8.7730124
Tang. 64.38 — 10.3241097
Tang. Rt Ascen ~~88.23~~ ~~6.43~~ 6.44 — ~~11.5502432~~ 9.0972111
180 − 6.44 = 173.16

Rad — 10
Sine ♎a 70.10 — 9.9734435
Tang. 23.30 — 9.6383019
Tang. ad 22.15 — 9.6117454

Rad. — 10.
Sine 86.36 — 9.9992349
Sine ~~64.38~~ 65.44 — ~~9.9559...~~
Sine Declin. ~~64.25~~ 65.31 — ~~9.9552033~~ 9.9590595

Rad — 10.
Sine 23.30 — 9.6006997
Cosine ♎a 70.10 — 9.5305650
Cosine ♎da = eda 82.13 — 9.1312647

Rt Ascen 173.16
Declin. ~~64.25~~ 65.31

Rad — 10.
Cosine ad 22.15 — 9.9663...
Tang a 23.11 — 9.6317...
Co Tang adδ ~~49.36~~ 68.23 — 9.5980791

eda − adδ = δde
82.13 − 49.36 / 68.23 = ~~32.37~~ 13.50

Cosine δdc ~~13.34~~ 13.30 ~~9.9254646~~ 9.9072171 ♈♎ 180 − ♎♊ 68.40 = ♈♊ 111.20

Cosine adc 82.18 ~~[illegible]~~ 9.1317064

Tang ad 22.15 ~~9.6[illegible]409~~ 9.6118409 ♈♊ + ♊c = ♈c

Tang dc ~~3.46~~ 3.16′ ~~18.7435473~~ 18.7435473 111.20 + ~~3.46 = 115.6~~ 3.16 = 114.36 the

~~8.3183027~~ 8.7563302

long. of the point c, rising with ♍ at the end of the second century

115.6
96.42
18.24

114.36
20.18.53
135.14.53 long. in the third Ecliptic

[illegible] 22.2.13
~~[illegible]~~ 1.0[illegible]
20.54.53

The point c had at the end of this second moved through Megha

13.20 × 10 = 133.20
2.54.53
135.14.53

Motion of c in the third Ecliptic 18°—

Aswina 12. 4. 13
1. 15. 57
To Megha 13. 20
Megha 3. 24. 53
18. 0. 50

6. 11. 33 of Aswini
7. 8. 27
13. 20. Megha
20. 38. 27
2. 54. 53
23. 23 20 [illegible]
[illegible]

and was advanced 2°.54′.53″ into the 11th Nacshatra. 14 whole motion in this term = 18°.24′. and it follows that the Spaddhita (?) with when the point c had the motion which is recorded to it, and of the observation was made at or near, the beginning the period in question would have been in the second century from the year when the star ~~a~~ touched the horizon (3045 from A D 1750) or in the twelfth century before Christ