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Project PHaEDRA - Henrietta Swan Leavitt #09

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October 24, 1904

Measures to determine the positions of Var. 22 & 23 in Scorpius
Plate A 3632

|||||Var 22|||Var 23|||

|x|y|x|y|Diff x|Diff y|X x 4 sec | Diff x |Diff y| X x 4 sec

Var.22|+2.60|+0.80|

Var. 23|+8.75|+54.25| [~~striethrough 44.25~~]

A|-2.75|+57.28|-2.75|+57.25|-5.37|+56.50|-22.72|-11.50|+3.03|-
48.64|+57.30 under +57.28|

B|-35.50|+3.22|-35.50|+3.25|-38.12|+2.44|-162.39|-44.25|-51.03|-
188.50|+3.20 under +2.22|

C|+20.80|-6.80|+20.80|-6.80|+18.18|-7.58|+77.45|+12.05|-61.05|+51.33|

Var.22|+2.60|+0.80|+2.65|+0.75|Var.22|Ann. Pre. in = 3.51s.|Prec. 45

ys = +157.95s|

Var.23|+8.75|+54.25|+8.75|+54.25|Var.23|Ann. Pre. in = 3.50s.|Prec. 45

ys = +157.50s|

Mean Var.22|+2.62|+0.78|Var.22|Ann. Pre. in delta = -8.43

|Prec. 45 ys = -379.35|

Mean Var.23|+8.75|+54.25|Var.23|Ann. Pre. in delta = -8.39

|Prec. 45 ys = -377.55|

a|DW|-18°4285|16h20m10.1s|-18°58.6'|sec delta=1.058|4 sec
delta=4.232

b|DW|-19°4370|16h17m54.1s|-19°52.2'|sec delta=1.064|4 sec delta
=4.256

c|DW|-20°4499|16h21m53.4s|-20°1.9'|sec delta=1.064|4 sec
delta=4.256

sec delta

|Position of Var.22 = 16h 23m 13s| -20°1.0'(1900)

|Position of Var.23 = 16h 23m 39s| -19°7.5'(1900)

Var.22

(a) 16h 20m 10.1s -18° 58.6'
-22.7 +56.5

16h 20m 32.8s -19° 55.1'

(b) 16h 17m 54.1s -19° 52.2'
-162.4 +2.4

16h 17m 216.5s -19° 54.6'
20 36.5

(c) 16h 21m 53.4s -20° 1.9'
+77.4 -7.6

16h 20m 36.0s -19° 54.3'

Var.23

(a) 16h 20m 10.1s -18° 58.6'
-48.6 +3.0

16h 20m 58.7s -19° 1.6'

(b) 16h 17m 54.1s -19° 52.2'
-188.5 -51.0

16h 17m 242.6s -19° 1.2'
21 2.6

(c) 16h 21m 53.4s -20° 1.9'
+51.3 -61.0

16h 21m +2.1s -20° 62.9'
-19° 0.9'

Var.22 Mean Pos. 16h 20m 35.1s -19° 54.7' (1855)
Var.23 Mean Pos. 16h 21m 1.1s -19° 1.2' (1855)
[[end page]]

[[new page]]
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October 24, 1904
Measures to determine the position of Var. 18

Plate A 2763

| x | y | x | y | Diff x | Diff y | x 4.32
Var. 18 | +1.90 | +0.25 | | | | |
A | -22.60 | +5.90 | -22.60 | +5.90 | -24.52 | +5. ~~8~~
~~5~~ | -105.98
B | +(.05 [^] ~~[[+.08]]~~ | +8.55 [^] ~~[[+8.58]]~~ | +9.10 | +8.60 | +7.16 | + 8.33 |
+30.93
C | + ~~[[+8.58]]~~ 2 ~~[[+8.58]]~~ 12.30 | -18.85 | +12.30 | -18.85 |
+10.38 | -19.10 | +44.84
Var. 18 | +1.95 | +0.25 | +1.90 | -0.25 | | |
Mean Var. | +1.92 | +0.25
a | DM ~~[[+8.58]]~~ -16 16 1 ~~[[+8.58]]~~ -21 degrees 4351 16h
16m 17.3s -21 degrees 53.6'
b | DM -21 4359 16 18 32.6 -21 51.0
c | DM -22 4167 16 18 48.3 -22 18.0

sec delta = 1.079
4 sec delta = 4.316

(a) ~~[[equation]]~~ (b) ~~[[equation]]~~
(c) ~~[[equation]]~~

Mean Pos. 16h 18m 2.83s -21 degrees 59.1' (1855)
Ann. Prec. in alpha = 3.56s Prec. 45 yrs. = +160.20"
" " " delta = -8.63" " " " -388.35"
Position of Var. 18 = 16h 20m 43s -22 degrees 5.6' (1900)

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