

Vol. XI

Positions
of Nebulae

a
b
c

For original meas. see Book 7, pg 188

A 8261 No. 78. August 16, 1910.

$$\begin{array}{rclcl}
 a = +28 \overset{9}{22} \overset{42}{46} & 11 & 52 & 10.7 & +28 \overset{9}{22} \overset{42}{46} = 11 \ 52 \ 2.9 - 49.7 = +28 \overset{8}{43} \overset{4}{4} \\
 b = +28 \overset{8}{22} \overset{66}{42} & 11 & 52 & 10.7 & +28 \overset{8}{22} \overset{66}{42} = 11 \ 52 \ 2.6 + 14.5 = +28 \ 44.2 \\
 c = +28 \ 2065 & 11 & 51 & 31.9 & +28 \ 37.8 \quad \quad \quad 11 \ 52 \ 2.8 \quad \quad \quad +28 \ 44.0
 \end{array}$$

x

3.0

43.7

$$\frac{c-a+28.6}{2}$$

$$c-a = -14.4$$

$$+0.1 - 0.2$$

$$-0.1 + 0.2$$

$$\begin{array}{r} .439 \\ -6.3 \end{array}$$

$$(-0.1 - 0.4)$$

$$(+2 + 0.5)$$

	x	y	x	y
a	40.0	168.0	45.0	174.5
b	50.8	36.6	55.8	46.1
n	47.3	65.6	52.2	75.0

$$\begin{array}{rclcl}
 x & & x & & y \\
 ma + 7.3 & n-b & 3.5 & m-a & -94.4 \cdot n-b + 29.0
 \end{array}$$

$$\begin{array}{rclcl}
 +7.2 & -3.6 & -99.5 & +289 & \\
 \hline
 +7.25 & -3.55 & -99.45 & +289.5 & \\
 \div .437 & \div .437 & -49.72 & +14.48 & \\
 +16.6 & -8.1 & & &
 \end{array}$$

using cat for
for +29 2248 & 2242
14 Dec. 188 Bk 7, table.

$$\begin{array}{r}
 +28 \ 42.7 - 12 \\
 44.2 + 3 \\
 44.6 + 7 \\
 44.2 + 3 \\
 \hline
 15.7 \ 13-12
 \end{array}$$

$$\begin{array}{r}
 0 \ 43.9 \\
 +28
 \end{array}$$

For original meas. see Bk. 7, pg. 194.

A 8261 No. 84 August 16, 1910.

$$\begin{array}{rclcl}
 a = +28 & 2049 & 11 & 42 & 39.6 & +28 & 26.3 & +70.0 = & 11 & 43 & 49.6 & +5.8 = & +28 & 32.1 \\
 b = +28 & 2058 & 11 & 46 & 31.4 & +28 & 45.9 & -161.4 = & 11 & 43 & 50.0 & -12.9 = & +28 & 33.0 \\
 c = +28 & 2055 & 11 & 45 & 46.6 & +28 & 5.1 & & 11 & 43 & 49.8 & & +28 & 32.6
 \end{array}$$

x

$$c - b = - \frac{44.8}{15.2}$$

$$-0.3 + 0.2$$

$$-0.5 + 0.4$$

$$\frac{cos + 38.1}{2}$$

$$\begin{array}{r}
 .441 \\
 19.8 \\
 - 6.8
 \end{array}$$

	x	y	x	y
a	8.4	90.2	18.4	102.8
b	110.0	127.5	120.0	140.0
η	38.2	101.8	49.1	114.2

x	y	x	y
$m-a + 30.8$	$m-b - 70.8$	$m-a + 11.6$	$m-b - 25.7$
$+ 30.7$	$- 70.9$	$+ 11.4$	$- 25.8$
$+ 30.75$	$- 70.85$	$+ 11.5$	$- 25.75$
$\div .439$	$\div .439$	$+ 5.75$	$- 12.88$
$+ 70.0$	$- 161.4$		

using calc. for
 $+28^{\circ} 20' 56''$
 $+28^{\circ} 20' 58''$
 & deriv. for
 Bk 7, p. 194

See card
 11 43 50.0 +28 32.8

A 8261 No. 85 August 16, 1910.

$$\begin{array}{rclcl}
 a = +28 \ 2049 & 11 & 42 & 39.6 & +28 \ 26.3 + 38.1 = 11 \ 43 \ 17.7 + 12.4 = +28 \ 38.7 \\
 b = +29 \ 2225 & 11 & 45 & 14.1 & +29 \ 15.5 - 116.2 = 11 \ 43 \ 17.9 - 32.7 = +28 \ 40.8 \\
 c = +28 \ 2056 & 11 & 45 & 46.6 & +28 \ 11.3 \quad \quad \quad 11 \ 43 \ 17.8 \quad \quad \quad +28 \ 39.8 \\
 & & & & \quad \quad \quad 5.1
 \end{array}$$

x

$$\frac{c-a + 28.2}{2}$$

$$c-b = +34.5$$

$$-0.1 + 0.1$$

$$-1.1 + 1.0$$

$$\begin{array}{r}
 441 \\
 +15.2
 \end{array}$$

	x	y	x	y
a	7.4	79.8	12.4	85.1
b	75.0	170.0	80.0	175.5
c	24.1	104.6	29.6	110.0

	x	y	x	y	
m-a	+16.7	-50.9	m-a	+24.8	-65.4
	+16.7	-50.9		+24.9	-65.5
	+16.7	-50.9		+24.85	-65.45
	÷ .438	÷ .438		+12.42	-32.72
	+38.1	-116.2			

For original meas. see B.S. 7 pg. 215

A 8261 No. 31 August 16, 1910

$$\begin{array}{rclcl}
 a = +30 & 2183 & 11 & 32 & 30.9 & +30 & 17.7 + 32.2 = 11 & 33 & 3.1 - 37.8 = +29 & 39.9 \\
 b = +29 & 2195 & 11 & 33 & 24.8 & +29 & 15.3 - 23.4 = 11 & 33 & 1.4 + 23.7 = +29 & 39.0 \\
 c = +29 & 2209 & 11 & 33 & 14.3 & +29 & 23.5 & 11 & 33 & 2.2 & +29 & 39.4
 \end{array}$$

$$\frac{cos + 29.24}{2}$$

$$c - a = +343.4$$

$$.436$$

$$+149.7$$

$$\begin{array}{rclcl}
 \text{mean pos} & 11 & 33 & 2.1 & +29 & 39.6 \\
 & & & & +0.9 - 0.8 & +0.5 - 0.4 \\
 & & & & (+1.0 - 0.7) & (+0.3 - 0.6)
 \end{array}$$

$$\begin{array}{rclcl}
 & x & y & x & y \\
 a & 5.0 & 124.5 & 10.0 & 127.2 \\
 b & 24.2 & 2.5 & 34.1 & 4.1 \\
 \eta & 19.0 & 49.8 & 24.0 & 51.5
 \end{array}$$

$$\begin{array}{rclcl}
 & x & y & x & y \\
 n-a & +14.0 & n-b & -35.2 & n-a & -75.7 & n-b & +47.3 \\
 & +14.0 & & -10.1 & & -75.7 & & +47.4 \\
 & +14.0 & & -10.15 & & -75.7 & & +47.35 \\
 & \div .434 & & \div .434 & & -37.85 & & +23.68 \\
 & +32.2 & & -23.4 & & & &
 \end{array}$$

For original meas. see Bf. 8, pg. 19.

A 8261 No. 123 August 16, 1910.

						1900 fm:	11	52	49.5	+ 27	34.2	
a = + 27 2071	11	49	44.6	+ 27	58.0	+ 45.5 =	11	50	30.1 - 8.5 =	+ 27	49.5	
b = + 27 2077	11	51	3.0	+ 27	44.7	- 32.8 =	11	50	29.2 + 4.4 =	+ 27	49.1	
c = + 26 2249	11	51	23.0	+ 26	56.4		11	50	29.6	+ 27	49.3	

	x		30.0	49.2
	@ - 6 = +21.0		+ 0.5 - 0.4	+ 0.2 - 0.2
$\frac{\cos + 26.9}{2}$	<u>-44.6</u>		(01, -03)	(+03 - 01)
	+ 9.4			

	x	y	x	y
a	25.4	165.8	30.4	175.2
b	60.0	140.0	65.0	149.5
n	45.5	148.9	50.5	158.2

11 50 29.7 4
31.3 + 12
30.1 0
29.2 - 9
0.3 12

x	x	y	y
$n-a + 20.1$	$m-b - 14.5$	$n-a - 16.9$	$m-b + 8.9$
<u>+ 20.1</u>	<u>- 14.5</u>	<u>- 17.0</u>	<u>+ 8.9</u>
+ 20.1	- 14.5	- 16.95	+ 8.8
$\div .442$	$\div .442$	- 8.48	+ 4.4
+ 45.5	- 32.8		

$$\begin{array}{r} + 27 \quad 48.5 - 8 \\ 50.0 + 7 \\ 49.5 + 2 \\ \hline 49.1 - 2 \\ \hline 47.1 \end{array}$$

For original meas. see SR. 8, pg. 20.

A 8261 No. 1224 August 16, 1910

1900 pos. 11 52 36.7 + 27 27.4

$$\begin{array}{rcl}
 a. + 27 \ 2069 & 11 \ 48 \ 25.9 & + 27 \ 44.1 + 110.6 = 11 \ 50 \ 16.5 - 1.7 = + 27 \ 42.4 \\
 b. + 27 \ 2075 & 11 \ 50 \ 44.6 & + 27 \ 41.9 - 26.9 = 11 \ 50 \ 14.7 + 0.6 = + 27 \ 42.5 \\
 c. + 26 \ 2273 & 11 \ 48 \ 59.0 & + 26 \ 52.3 \quad 11 \ 50 \ 17.1 \quad + 27 \ 42.4 \\
 & & \quad 11 \ 50 \ 17.2 \quad + 27 \ 42.4 \\
 & & \quad - 0.6 + 0.6 \quad 0.0 + 0.1 \\
 & & \quad - 0.7 + 0.5
 \end{array}$$

$\cos + \frac{26.9}{2}$
 $\frac{.446}{+ 14.8}$

	x	y	x	y
a	15.0	110.9	20.0	118.5
b	75.9	108.8	80.9	116.4
η	64.0	107.6	69.0	115.1

	x	x	y	y
m-a + 49.0	m-b - 11.9	m-a - 3.3	m-b - 1.2	
+ 49.0	- 11.9	- 3.4	- 1.3	
+ 49.0	- 11.9	- 3.35	- 1.25	
$\div .443$	$\div .443$	- 1.68	- 0.62	
+ 110.6	- 26.9			

A 8261 No. 151 August 16, 1910.

x	x	y	y
$n-a + 8.2 \text{ m-l} -$	$3.9 \text{ m-a} + 87.2 \text{ m-l} -$	53.0	
$+ 8.1$	$- 4.1$	$+ 87.2$	$- 53.0$
$+ 8.15$	$- 4.0$	$+ 87.2$	$- 53.0$
$\div .447$	$\div .447$	$+ 43.6$	$- 26.5$
$+ 18.2$	$- 8.9$		

very cat for. for
all the comb. stain
p 48, BK VIII
" 147 " X
" + above.

$\begin{array}{r}
 141 \\
 + 26 \\
 \hline
 167
 \end{array}$

For original meas. see Bf 8, pg 78.

A 8361 No. 200 August 16, 1910

$$\begin{array}{rclcl}
 a = +26 \ 2262 & 11 & 44 & 57.5 & +26 \ 15.2 + 103.8 = 11 \ 46 \ 35.3 + 7.2 = +26 \ 224 \\
 b = +26 \ 2272 & 11 & 48 & 45.4 & +26 \ 29.1 - 129.4 = 11 \ 46 \ 36.0 - 7.2 = +26 \ 21.9 \\
 c = +27 \ 2063 & 11 & 44 & 21.1 & +27 \ 10.3 & 11 \ 46 \ 35.6 & +26 \ 22.2 \\
 & & & & & 37.6 & 22.7 \\
 & & & & & 36.6 & 22.4
 \end{array}$$

$$\frac{cos + 27.2}{2}$$

$$c - a = -30.4$$

$$\begin{array}{r}
 .445 \\
 -13.5
 \end{array}$$

$$-0.3 + 0.4$$

$$+0.2 - 0.3$$

$$(-13 \ -0.6)$$

$$0.0 \ -0.5$$

	x	y	x	y
a	20.0	30.0	150	34.5
b	124.4	58.8	119.5	63.3
n	66.5	44.5	61.5	48.9

x	x	y	y
n-a + 46.5	n-b - 57.9	n-a + 14.5	n-b - 14.3
+ 46.5	- 58.0	+ 14.4	- 14.4
+ 46.5	- 57.95	+ 14.45	- 14.35
÷ .448	÷ .448	+ 7.22	- 7.18
+ 103.8	- 129.4		

Using cal. for.
for 2265, 2270 &
2262.
look over 1.98 table

$$\begin{array}{r}
 11 \ 46 \ 37.3 \\
 11 \ 46 \ 37.6 \\
 11 \ 46 \ 37.4 \\
 11 \ 46 \ 36.0 \\
 \hline
 3 \\
 -1.1 \\
 \hline
 11 \ 46 \ 37.1
 \end{array}$$

A 8261 No. 233 August 17, 1910.

	x	y	x	y
a	30.0	13.6	35.0	20.0
b	44.2	~~14.8~~ ^{1.3}	79.3	147.8
n	47.6	65.7	52.7	72.2

$$\begin{array}{r}
 + 25 \quad 56.6 + 4 \\
 58.0 - 12 \\
 56.7 + 5 \\
 56.4 + 2 \\
 \hline
 7 \quad 11.2
 \end{array}$$

x	x	y	y
n-a + 17.6	n-b - 26.6	n-a + 52.2	n-b - 75.5
+ 17.7	- 26.6	+ 52.2	- 75.6
+ 17.65	- 26.6	+ 52.15	- 75.55
÷ .449	÷ .449	+ 26.08	- 37.78
+ 39.3	- 59.2		

For original meas. see Bsf. 8, pg 141.

A 8261 No. 236 August 17, 1910.

$$\begin{array}{rcllcl}
 & & 1900 \text{ pro. } 11 & 47 & 11.2 & +25 & 38.8 \\
 a = +26 \ 2260 & 11 & 43 & 49.2 & +26 & 10.1 & +60.9 = 11 \ 44 \ 50.1 \ \bar{\times} 15.3 = +25 \ 54.8 \\
 b = +25 \ 2430 & 11 & 46 & 39.3 & +25 & 30.3 & -106.7 = 11 \ 44 \ 52.6 + 24.0 = +25 \ 54.3 \\
 c = +26 \ 2266 & 11 & 46 & 34.3 & +26 & 30.4 & 11 \ 44 \ 51.4 \quad +25 \ 54.6
 \end{array}$$

$$\begin{array}{rcl}
 & x & \\
 c-b = -5.0 & & -1.3 + 1.2 \quad +0.2 - 0.3 \\
 \cos +26.5 & & \\
 \quad \quad \quad 2 & & \\
 & .447 & \\
 & -2.2 &
 \end{array}$$

$$\begin{array}{rclcl}
 & x & y & x & y \\
 a & 24.6 & 97.2 & 29.6 & 103.7 \\
 b & 100.0 & 18.5 & 105.0 & 25.0 \\
 n & 52.0 & 66.6 & 57.0 & 73.0
 \end{array}$$

$$\begin{array}{rclcl}
 & x & x & y & y \\
 n-a + 27.4 & n-b & -48.0 & n-a & \bar{\times} 30.6 & n-b & +48.1 \\
 +27.4 & -48.0 & & \bar{\times} 30.7 & +48.0 \\
 +27.4 & -48.0 & & \bar{\times} 30.65 & +48.05 \\
 \div .450 & \div .450 & & \bar{\times} 15.32 & +24.02 \\
 +60.9 & -106.9 & & &
 \end{array}$$

A 7497 No. 31 August 16, 1910

a =

b =

c =

a

b

c

A 8326, No 48 Sept. 8th 1910

a = +1 2485	10 42 10.6	+1 6.6
b = +0 2710	10 45 10.9	+0 34.7
c = +1 2495	10 44 49.0	+1 47.2

x

$$\frac{c-a+1.8}{2}$$

$$c-b = -23.9$$

$$\frac{.500}{-12.0}$$

x

y

x

y

a

b

c

x

x

y

y

m-a

m-b

m-a

m-b

A 8326 No. 69 Sept 8, 1910

$\alpha =$

$\delta =$

$\epsilon =$

A 8326 No 70 Sept. 8, 1910.

1910phae.proj.2304.