

## SVXII for Run 2b

SVXIIb Layer	Number of R-Phi Chips						all
	iz= 1	2	3	4	5	6	
1	48	48	48	48	48	48	288
2	64	64	64	64	64	64	384
3	80	80	80	80	80	80	480
4	96	96	96	96	96	96	576
all	288	288	288	288	288	288	<b>1,728</b>

### 5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ , $N_{\text{over}} = 7$ )

SVXIIb Layer	Average Maximum R-Phi Chip Hits						5,000 Top+<3>MB all
	iz= 1	2	3	4	5	6	
1	17.4	21.6	24.8	25.0	21.8	17.4	39.7
2	15.6	18.6	20.9	20.9	18.7	15.6	30.6
3	14.8	17.2	19.0	19.0	17.4	14.8	26.5
4	14.3	16.3	17.7	17.8	16.4	14.4	24.0
all	18.6	22.8	25.9	26.0	23.0	18.6	<b>40.0</b>

### 5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ , $N_{\text{over}} = 7$ )

SVXIIb Layer	Average Maximum R-Phi Chip Occupancy						5,000 Top+<3>MB all
	iz= 1	2	3	4	5	6	
1	13.6%	16.9%	19.4%	19.5%	17.0%	13.6%	31.0%
2	12.2%	14.5%	16.3%	16.3%	14.6%	12.2%	23.9%
3	11.6%	13.4%	14.8%	14.8%	13.6%	11.6%	20.7%
4	11.2%	12.7%	13.8%	13.9%	12.8%	11.3%	18.8%
all	14.5%	17.8%	20.2%	20.3%	18.0%	14.5%	<b>31.3%</b>

## SVXII for Run 2b (Option A)

Note: izz =1 corrections to iz = 1, 2, 3 and izz = 2 corresponds to iz = 4, 5, 6.

SVXIIb Layer	Pathways (Option A)		
	izz= 1	2	all
1	12	12	24
2	16	16	32
3	20	20	40
4	24	24	48
all	72	72	<b>144</b>

SVXIIb Layer	Chips/Pathway (Option A)		
	izz= 1	2	ave
1	12	12	12
2	12	12	12
3	12	12	12
4	12	12	12
ave	12	12	<b>12</b>

5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )

SVXIIb Layer	Ave Max Pathway Hits		
	izz= 1	2	all
1	93	94	123
2	73	74	92
3	65	65	79
4	59	59	70
all	94	94	<b>123</b>

5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )

SVXIIb Layer	Ave Max Read Time (R- $\phi$ only)		
	izz= 1	2	all
1	3.7	3.7	4.9
2	2.9	3.0	3.7
3	2.6	2.6	3.1
4	2.4	2.4	2.8
all	3.7	3.8	<b>4.9</b>

## SVXII for Run 2b (Option B)

Note: izz =1 corrections to iz = 1, 2; izz =2 corrections to iz = 3; izz =3 corrections to iz = 4; and izz = 4 corresponds to iz = 5, 6.

SVXIIb Number of Pathways (Option B)					
Layer	izz= 1	2	3	4	all
1	12	12	12	12	48
2	16	16	16	16	64
3	20	20	20	20	80
4	24	24	24	24	96
all	72	72	72	72	<b>288</b>

SVXIIb Chips/Pathway (Option B)					
Layer	izz= 1	2	3	4	ave
1	8	4	4	8	6
2	8	4	4	8	6
3	8	4	4	8	6
4	8	4	4	8	6
ave	8	4	4	8	<b>6</b>

**5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )**

SVXIIb Average Maximum Pathway Hits					
Layer	izz= 1	2	3	4	all
1	67	64	64	68	105
2	56	54	54	57	81
3	52	49	50	52	70
4	49	47	47	49	63
all	68	65	65	69	<b>106</b>

**5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )**

SVXIIb Ave Max Readout Time (R- $\phi$ only)					
Layer	izz= 1	2	3	4	all
1	2.7	2.5	2.6	2.7	4.2
2	2.3	2.1	2.2	2.3	3.2
3	2.1	2.0	2.0	2.1	2.8
4	2.0	1.9	1.9	2.0	2.5
all	2.7	2.6	2.6	2.8	<b>4.2</b>

## SVXII for Run 2b (Option C)

Note: Layer 1 uses Option B and Layer 2, 3, 4 uses Option A.

SVXIIb Pathways (Option C)					
Layer	izz= 1	2	3	4	all
1	12	12	12	12	48
2	16		16		32
3	20		20		40
4	24		24		48
all					168

SVXIIb Chips/Pathway (Option C)					
Layer	izz= 1	2	3	4	ave
1	8	4	4	8	6
2	12		12		12
3	12		12		12
4	12		12		12
ave					10.3

**5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )**

SVXIIb Average Maximum Pathway Hits					
Layer	izz= 1	2	3	4	all
1	67	64	64	68	105
2	73		74		92
3	65		65		79
4	59		59		70
all					107

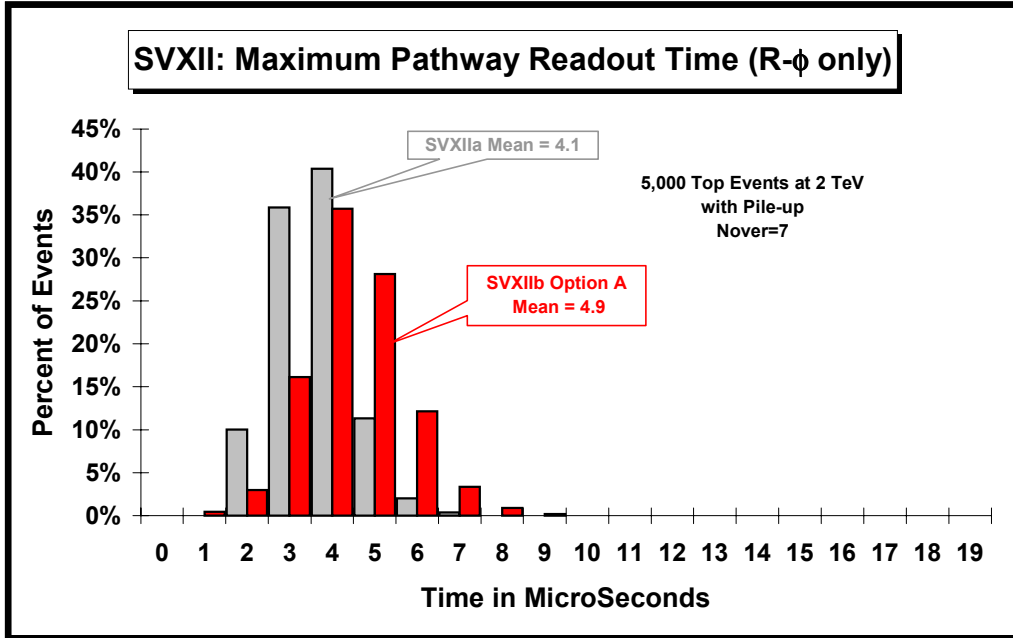
**5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )**

SVXIIb Ave Max Readout Time (R- $\phi$ only)					
Layer	izz= 1	2	3	4	all
1	2.7	2.5	2.6	2.7	4.2
2	2.9		3.0		3.7
3	2.6		2.6		3.1
4	2.4		2.4		2.8
all					4.3

# SVXII for Run 2b

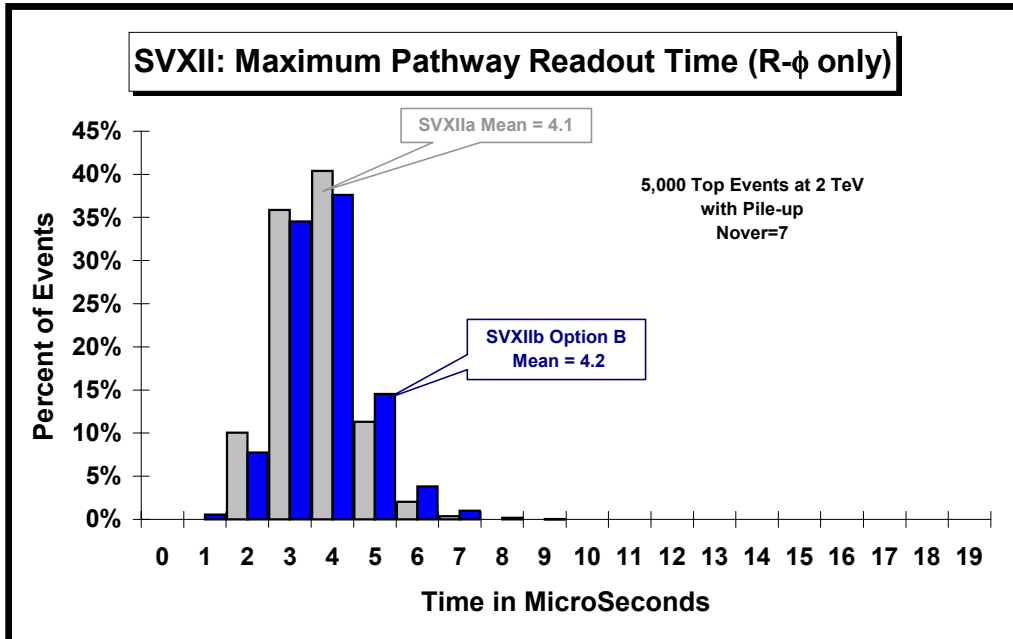
Note: SVXIIa comes from CDF Note #4783 Fig. 38.

## SVXIIb (Option A) compared with SVXIIa



5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )

## SVXIIb (Option B) compared with SVXIIa

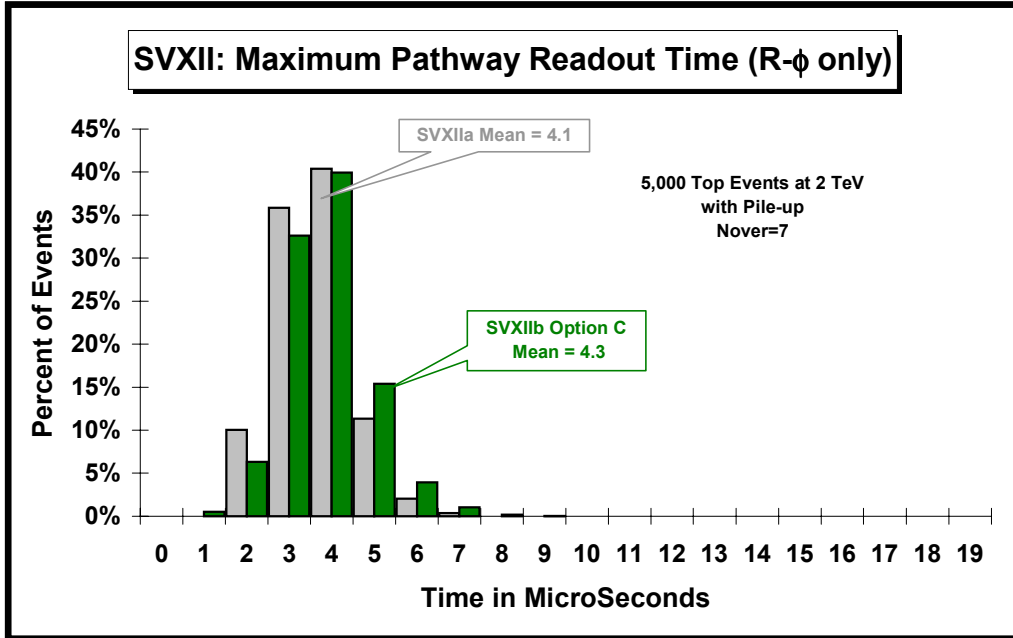


5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )

# SVXII for Run 2b

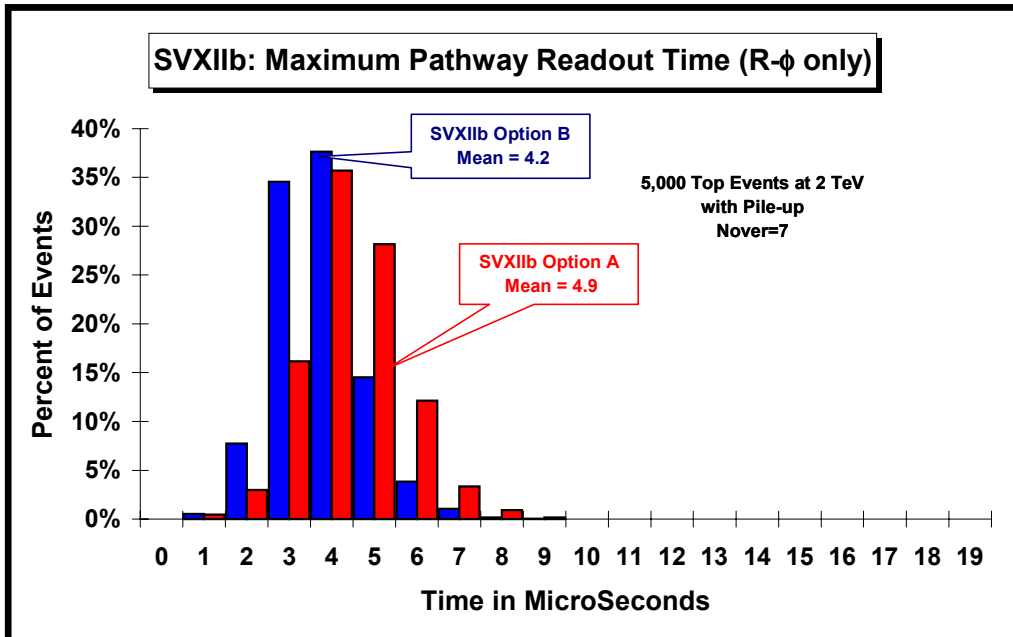
Note: SVXIIa comes from CDF Note #4783 Fig. 38.

## SVXIIb (Option C) compared with SVXIIa



5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )

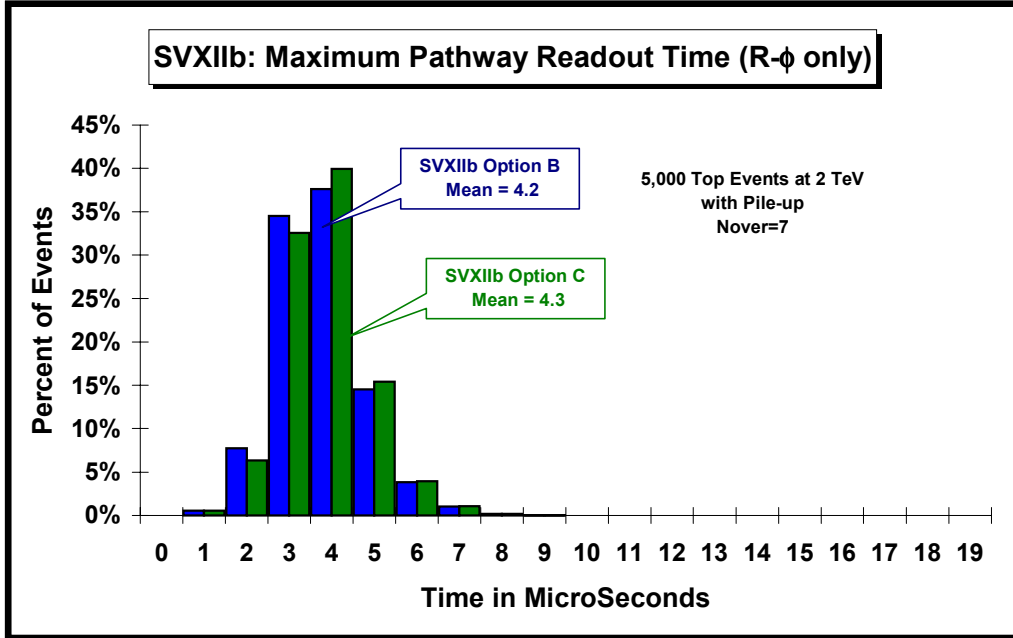
## SVXIIb (Option A) compared with SVXIIb (Option B)



5,000 Top + <3> Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )

# SVXII for Run 2b

SVXIIb (Option A) compared with SVXIIb (Option B)



5,000 Top +  $\langle 3 \rangle$  Min-Bias at 2 TeV ( $\sigma_z = 30\text{cm}$ ,  $N_{\text{over}} = 7$ )