

SVXIb Layout

SVXIb Layer	Number of R-Z Chips						total
	iz= 1	2	3	4	5	6	
0	0	0	0	0	0	0	0
1	18	18	18	18	18	18	108
2	24	24	24	24	24	24	144
3	48	48	48	48	48	48	288
4	64	64	64	64	64	64	384
5	80	80	80	80	80	80	480
6	96	96	96	96	96	96	576
total	330	330	330	330	330	330	1,980

SVXIb Layer	Number of R-Phi Chips						total
	iz= 1	2	3	4	5	6	
0	24	24	24	24	24	24	144
1	12	12	12	12	12	12	72
2	24	24	24	24	24	24	144
3	48	48	48	48	48	48	288
4	64	64	64	64	64	64	384
5	80	80	80	80	80	80	480
6	96	96	96	96	96	96	576
total	348	348	348	348	348	348	2,088

SVXIb Layer	Number of Pathways						all
	iz= 1	2	3	4	5	6	
0	12	12	12	12	12	12	72
1	6	6	6	6	6	6	36
2	6	6	6	6	6	6	36
3		24			24		48
4		32			32		64
5		40			40		80
6		24			24		48
all							384

SVXIb Layer	Chips/Pathway
0	2 = 2 + 0
1	5 = 2 + 3
2	8 = 4 + 4
3	12 = 12 or 12
4	12 = 12 or 12
5	12 = 12 or 12
6	24 = 12 + 12

SVXIIb: Isajet Soft Min-Bias (No Pile-Up)

5,000 Min-Bias events with no pile-up at 2 TeV ($\sigma_z = 30\text{cm}$, $N_{\text{over}} = 7$)

SVXIIb Layer	Average Maximum Pathway Hits						5,000 Min-Bias all
	iz= 1	2	3	4	5	6	
0	19	20	21	21	20	19	28
1	54	54	54	54	54	54	84
2	65	68	70	70	68	65	81
3	97			97			108
4	64			64			67
5	77			77			82
6	78			78			83
all							111

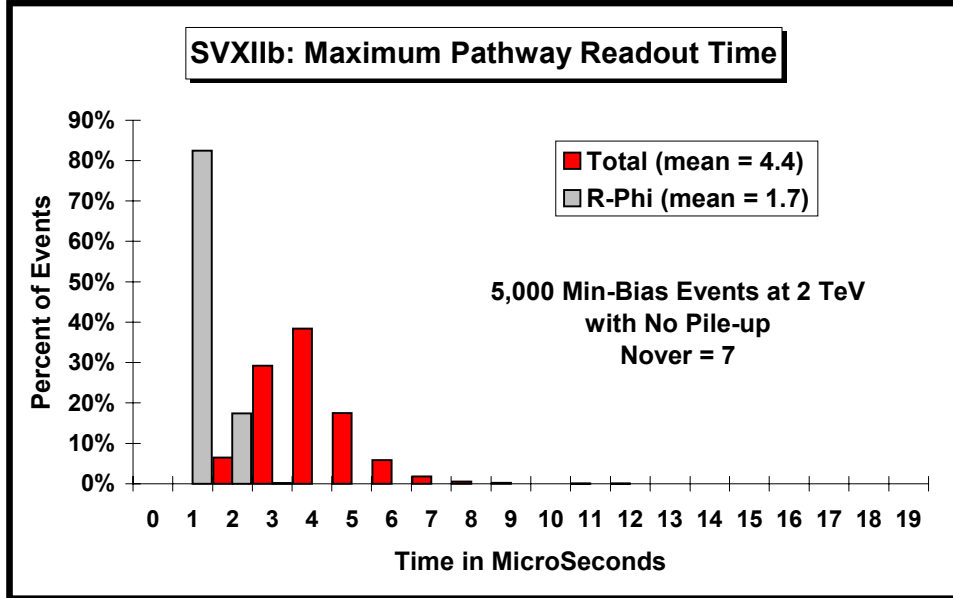
SVXIIb Layer	Ave Max Readout Time (total)						5,000 Min-Bias all
	iz= 1	2	3	4	5	6	
0	0.8	0.8	0.8	0.8	0.8	0.8	1.1
1	2.2	2.2	2.2	2.2	2.2	2.2	3.4
2	2.6	2.7	2.8	2.8	2.7	2.6	3.2
3	3.9			3.9			4.3
4	2.6			2.6			2.7
5	3.1			3.1			3.3
6	3.1			3.1			3.3
all							4.4

SVXIIb Layer	Ave Max Pathway Hits (R- ϕ only)						5,000 Min-Bias all
	iz= 1	2	3	4	5	6	
0	19	20	21	21	20	19	28
1	16	17	17	17	17	16	21
2	32	34	35	35	34	32	41
3	38			38			42
4	36			36			38
5	35			35			37
6	34			34			35
all							43

SVXIIb Layer	Ave Max Readout Time (R- ϕ only)						5,000 Min-Bias all
	iz= 1	2	3	4	5	6	
0	0.8	0.8	0.8	0.8	0.8	0.8	1.1
1	0.7	0.7	0.7	0.7	0.7	0.7	0.9
2	1.3	1.4	1.4	1.4	1.4	1.3	1.6
3	1.5			1.5			1.7
4	1.4			1.4			1.5
5	1.4			1.4			1.5
6	1.4			1.4			1.4
all							1.7

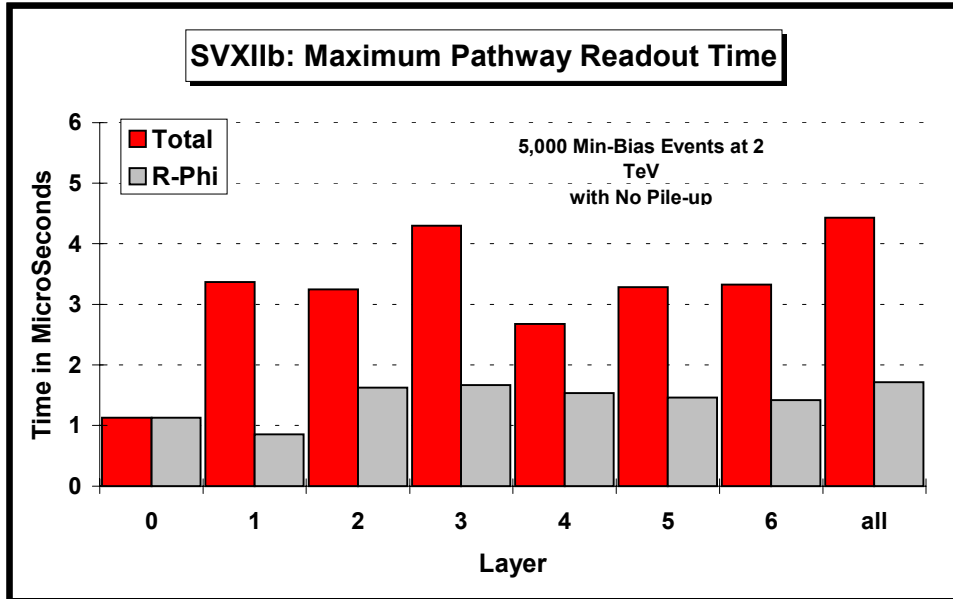
SVXIIb: Isajet Soft Min-Bias (No Pile-Up)

Average Maximum Pathway Readout Time (all layers)



5,000 Min-Bias events with no pile-up at 2 TeV ($\sigma_z = 30\text{cm}$, $N_{\text{over}} = 7$)

Average Maximum Pathway Readout Time per Layer



5,000 Min-Bias events with no pile-up at 2 TeV ($\sigma_z = 30\text{cm}$, $N_{\text{over}} = 7$)

SVXIIb: Isajet Soft Jets (No Pile-Up)

5,000 Jet events ($P_T(\text{hard}) > 3 \text{ GeV}/c$) with no pile-up at 2 TeV ($\sigma_z = 30\text{cm}$, $N_{\text{over}} = 7$)

SVXIIb Layer	Average Maximum Pathway Hits						5,000 Jet3
iz=	1	2	3	4	5	6	all
0	22	24	25	25	24	22	37
1	65	65	66	66	66	66	101
2	71	76	79	79	76	71	99
3	121			120			134
4	69			69			73
5	87			87			93
6	89			89			95
all							137

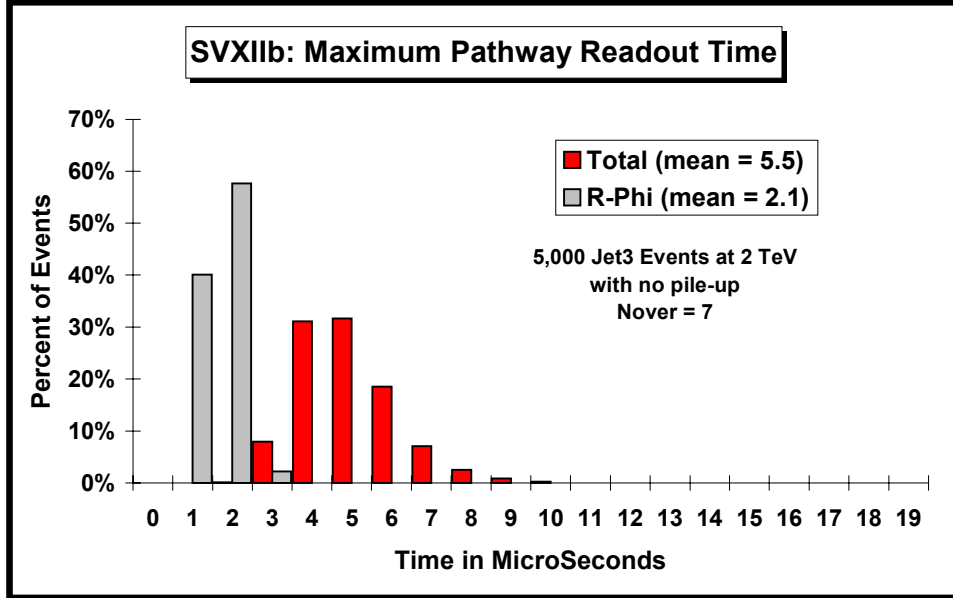
SVXIIb Layer	Ave Max Readout Time (total)						5,000 Jet3
iz=	1	2	3	4	5	6	all
0	0.9	1.0	1.0	1.0	1.0	0.9	1.5
1	2.6	2.6	2.7	2.6	2.6	2.6	4.0
2	2.8	3.0	3.2	3.2	3.0	2.8	3.9
3	4.8			4.8			5.4
4	2.8			2.8			2.9
5	3.5			3.5			3.7
6	3.6			3.6			3.8
all							5.5

SVXIIb Layer	Ave Max Pathway Hits (R- ϕ only)						5,000 Jet3
iz=	1	2	3	4	5	6	all
0	22	24	25	25	24	22	37
1	18	19	20	20	19	18	26
2	35	38	40	40	38	35	49
3	45			45			51
4	41			41			45
5	39			39			41
6	37			37			39
all							53

SVXIIb Layer	Ave Max Readout Time (R- ϕ only)						5,000 Jet3
iz=	1	2	3	4	5	6	all
0	0.9	1.0	1.0	1.0	1.0	0.9	1.5
1	0.7	0.8	0.8	0.8	0.8	0.7	1.0
2	1.4	1.5	1.6	1.6	1.5	1.4	2.0
3	1.8			1.8			2.0
4	1.6			1.6			1.8
5	1.5			1.5			1.7
6	1.5			1.5			1.6
all							2.1

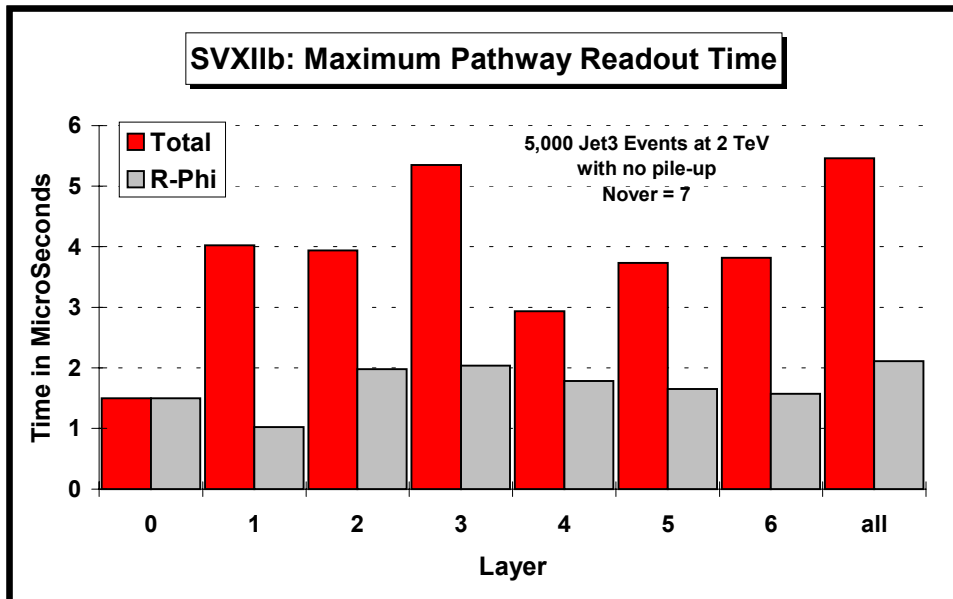
SVXIIb: Isajet Soft Jets (No Pile-Up)

Average Maximum Pathway Readout Time (all layers)



5,000 Jet3 events with no pile-up at 2 TeV ($\sigma_z = 30\text{cm}$, $N_{\text{over}} = 7$)

Average Maximum Pathway Readout Time per Layer



5,000 Jet3 events with no pile-up at 2 TeV ($\sigma_z = 30\text{cm}$, $N_{\text{over}} = 7$)

SVXIIb: Isajet Soft Min-Bias Pile-Up

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

SVXIIb Layer	Average Maximum Pathway Hits						5,000 <3> MB
iz=	1	2	3	4	5	6	all
0	25	28	30	29	28	25	39
1	80	78	78	77	79	79	117
2	76	82	88	88	83	76	103
3	143			143			157
4	73			73			77
5	95			95			102
6	97			97			103
all							160

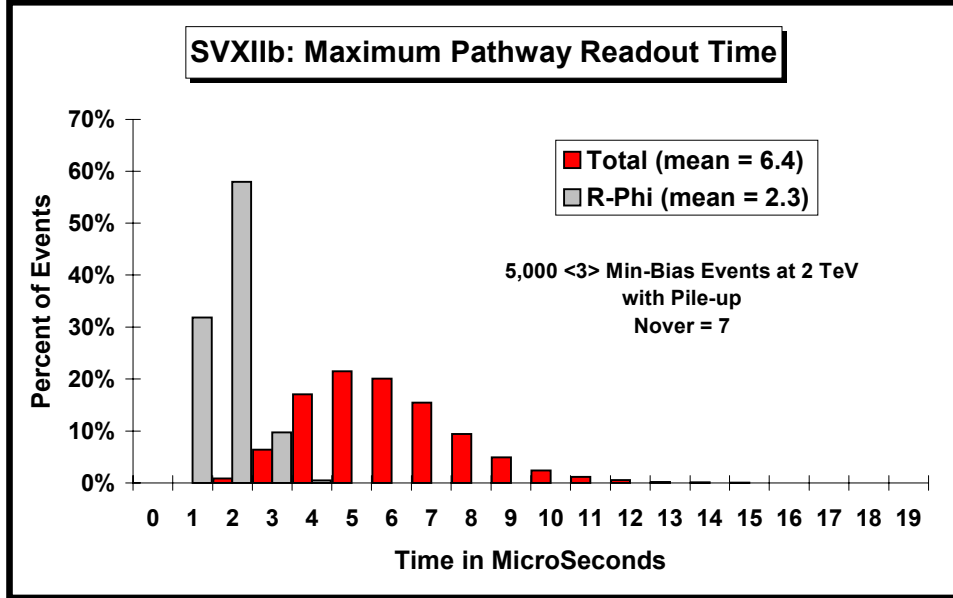
SVXIIb Layer	Ave Max Readout Time (total)						5,000 <3> MB
iz=	1	2	3	4	5	6	all
0	1.0	1.1	1.2	1.2	1.1	1.0	1.6
1	3.2	3.1	3.1	3.1	3.1	3.2	4.7
2	3.1	3.3	3.5	3.5	3.3	3.1	4.1
3	5.7			5.7			6.3
4	2.9			2.9			3.1
5	3.8			3.8			4.1
6	3.9			3.9			4.1
all							6.4

SVXIIb Layer	Ave Max Pathway Hits (R- ϕ only)						5,000 <3> MB
iz=	1	2	3	4	5	6	all
0	25	28	30	29	28	25	39
1	20	21	22	22	21	19	27
2	38	41	44	44	42	38	52
3	51			51			56
4	44			45			48
5	41			41			44
6	39			39			41
all							57

SVXIIb Layer	Ave Max Readout Time (R- ϕ only)						5,000 <3> MB
iz=	1	2	3	4	5	6	all
0	1.0	1.1	1.2	1.2	1.1	1.0	1.6
1	0.8	0.8	0.9	0.9	0.8	0.8	1.1
2	1.5	1.6	1.8	1.8	1.7	1.5	2.1
3	2.0			2.0			2.2
4	1.8			1.8			1.9
5	1.7			1.7			1.8
6	1.6			1.6			1.7
all							2.3

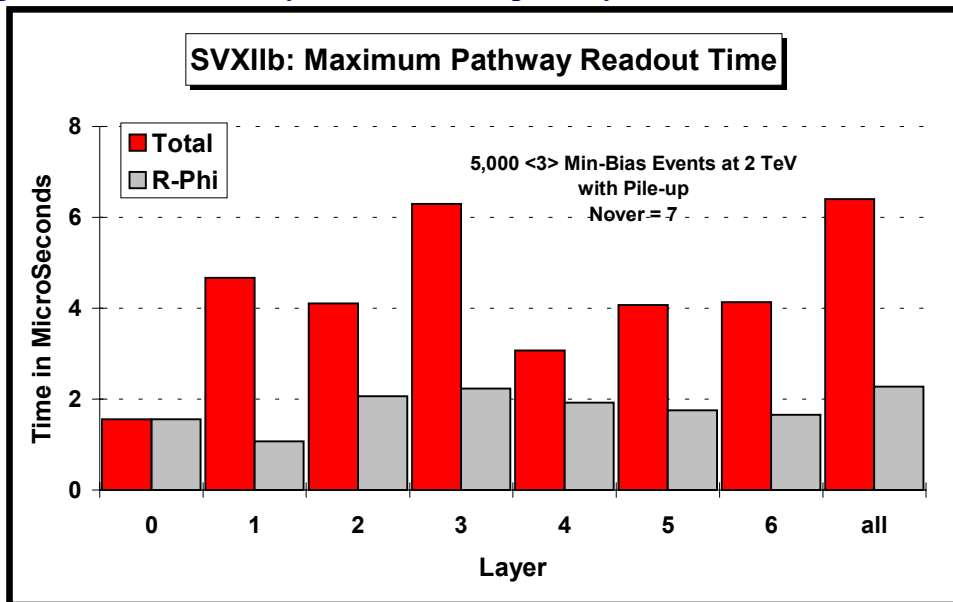
SVXIIb: Isajet Soft Min-Bias Pile-Up

Average Maximum Pathway Readout Time (all layers)



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

Average Maximum Pathway Readout Time per Layer



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

SVXIIb: Jet3 + <3> Min-Bias

5,000 Jet3 events with pile-up (<3> Min-Bias) at 2 TeV ($\sigma_z = 30\text{cm}$, $N_{\text{over}} = 7$)

SVXIIb Layer	Average Maximum Pathway Hits						5,000 Jet3+<3>MB
iz=	1	2	3	4	5	6	all
0	29	34	36	36	34	30	49
1	97	96	96	95	97	98	140
2	85	95	103	103	95	85	123
3	180			182			199
4	81			81			85
5	110			110			118
6	112			112			120
all							201

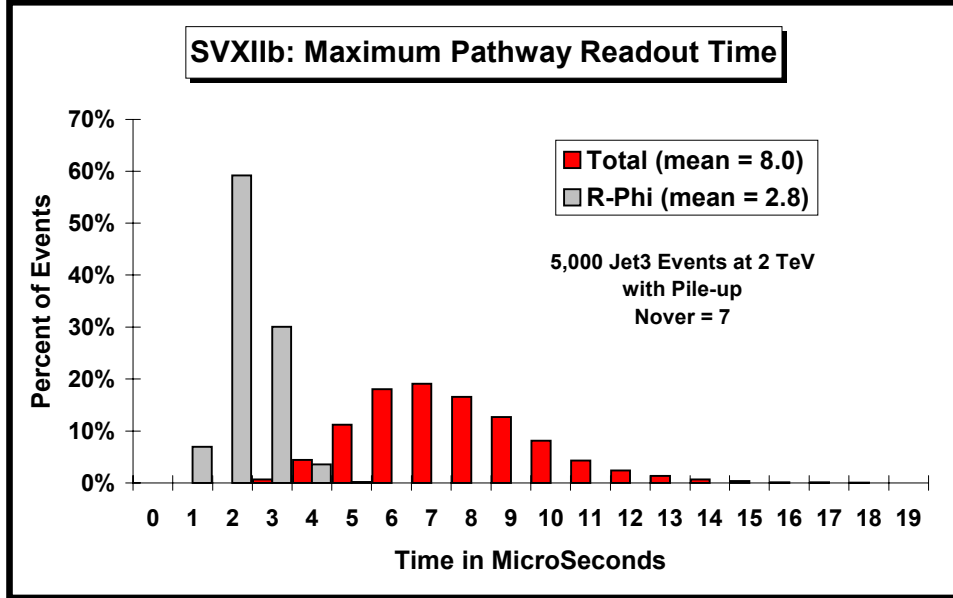
SVXIIb Layer	Ave Max Readout Time (total)						5,000 Jet3+<3>MB
iz=	1	2	3	4	5	6	all
0	1.2	1.3	1.4	1.5	1.3	1.2	1.9
1	3.9	3.8	3.9	3.8	3.9	3.9	5.6
2	3.4	3.8	4.1	4.1	3.8	3.4	4.9
3	7.2			7.3			8.0
4	3.2			3.2			3.4
5	4.4			4.4			4.7
6	4.5			4.5			4.8
all							8.0

SVXIIb Layer	Ave Max Pathway Hits (R- ϕ only)						5,000 Jet3+<3>MB
iz=	1	2	3	4	5	6	all
0	29	34	36	36	34	30	49
1	22	24	25	25	24	22	31
2	43	48	51	52	48	43	62
3	61			62			69
4	52			52			56
5	47			47			50
6	44			44			46
all							70

SVXIIb Layer	Ave Max Readout Time (R- ϕ only)						5,000 Jet3+<3>MB
iz=	1	2	3	4	5	6	all
0	1.2	1.3	1.4	1.5	1.3	1.2	1.9
1	0.9	1.0	1.0	1.0	1.0	0.9	1.3
2	1.7	1.9	2.1	2.1	1.9	1.7	2.5
3	2.5			2.5			2.7
4	2.1			2.1			2.2
5	1.9			1.9			2.0
6	1.7			1.7			1.9
all							2.8

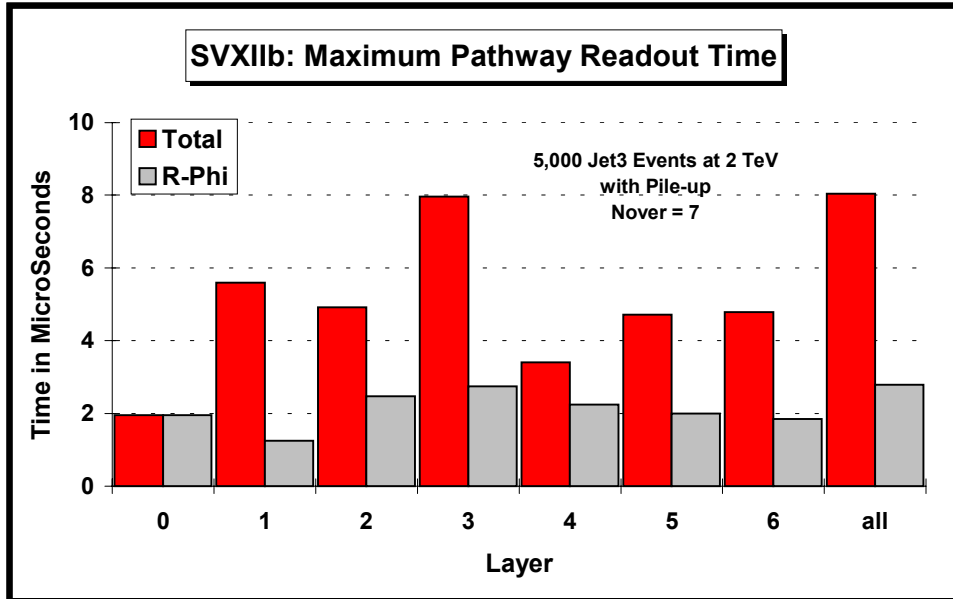
SVXIIb: Jet3 + <3> Min-Bias

Average Maximum Pathway Readout Time (all layers)



5,000 Jet3 + <3> Min-Bias at 2 TeV ($\sigma_z = 30\text{cm}$, $N_{\text{over}} = 7$)

Average Maximum Pathway Readout Time per Layer



5,000 Jet3 + <3> Min-Bias at 2 TeV ($\sigma_z = 30\text{cm}$, $N_{\text{over}} = 7$)

SVXIIb: Top + <3> Min-Bias

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

SVXIIb Layer	Average Maximum Pathway Hits						5,000 Top+<3>MB all
	iz= 1	2	3	4	5	6	
0	36	44	48	48	44	35	95
1	106	110	113	113	110	105	171
2	99	122	138	138	121	99	228
3	222			223			256
4	102			101			120
5	137			137			154
6	150			150			172
all							270

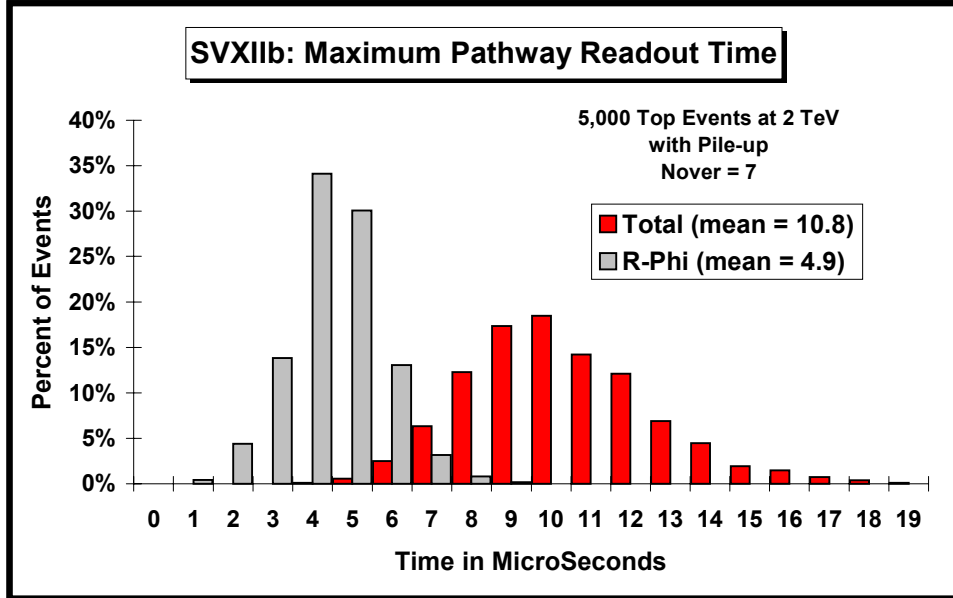
SVXIIb Layer	Ave Max Readout Time (total)						5,000 Top+<3>MB all
	iz= 1	2	3	4	5	6	
0	1.4	1.7	1.9	1.9	1.7	1.4	3.8
1	4.3	4.4	4.5	4.5	4.4	4.2	6.8
2	4.0	4.9	5.5	5.5	4.8	3.9	9.1
3	8.9			8.9			10.2
4	4.1			4.1			4.8
5	5.5			5.5			6.2
6	6.0			6.0			6.9
all							10.8

SVXIIb Layer	Ave Max Pathway Hits (R- ϕ only)						5,000 Top+<3>MB all
	iz= 1	2	3	4	5	6	
0	36	44	48	48	44	35	95
1	26	29	32	32	29	25	54
2	49	61	69	69	60	49	114
3	88			88			115
4	72			72			91
5	64			64			77
6	59			58			69
all							123

SVXIIb Layer	Ave Max Readout Time (R- ϕ only)						5,000 Top+<3>MB all
	iz= 1	2	3	4	5	6	
0	1.4	1.7	1.9	1.9	1.7	1.4	3.8
1	1.0	1.2	1.3	1.3	1.2	1.0	2.2
2	2.0	2.4	2.8	2.8	2.4	2.0	4.6
3	3.5			3.5			4.6
4	2.9			2.9			3.6
5	2.6			2.5			3.1
6	2.3			2.3			2.8
all							4.9

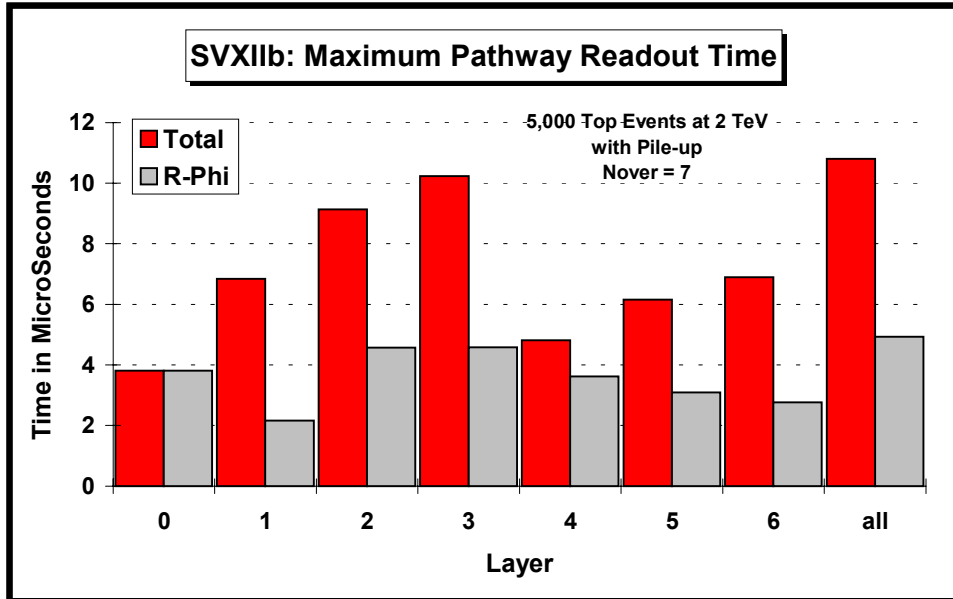
SVXIIb: Top + <3> Min-Bias

Average Maximum Pathway Readout Time (all layers)



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

Average Maximum Pathway Readout Time per Layer



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

SVXIIb: Process Summary

Average Maximum Pathway Readout Time (all layers)

