

L00: Total Chip Hits

L00 M99 Number of Chips & Notation:

L00: Number of Chips							
Radius	Forward	Middle	Central	Central	Middle	Forward	sum
inner	6	6	6	6	6	6	36
outer	12	12	12	12	12	12	72
sum	18	18	18	18	18	18	108

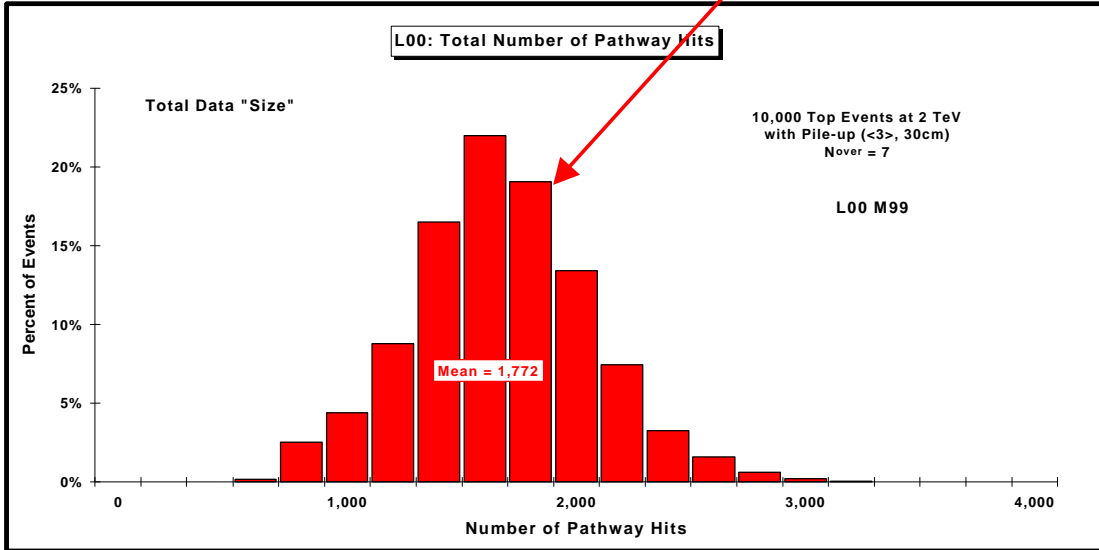
10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Total Chip Hits and Average Hits per Chip:

L00: Average Total Chip Hits							
Radius	Forward	Middle	Central	Central	Middle	Forward	sum
inner	85	106	120	119	105	83	618
outer	160	199	221	221	196	158	1,154
sum	244	305	341	340	301	241	1,772

L00: Average Hits/Chip							
Radius	Forward	Middle	Central	Central	Middle	Forward	all
inner	14	18	20	20	18	14	17
outer	13	17	18	18	16	13	16
all	14	17	19	19	17	13	16

L00 M99 Total Number of Pathway Hits (total data "size"):



L00: Chip with Maximum Hits

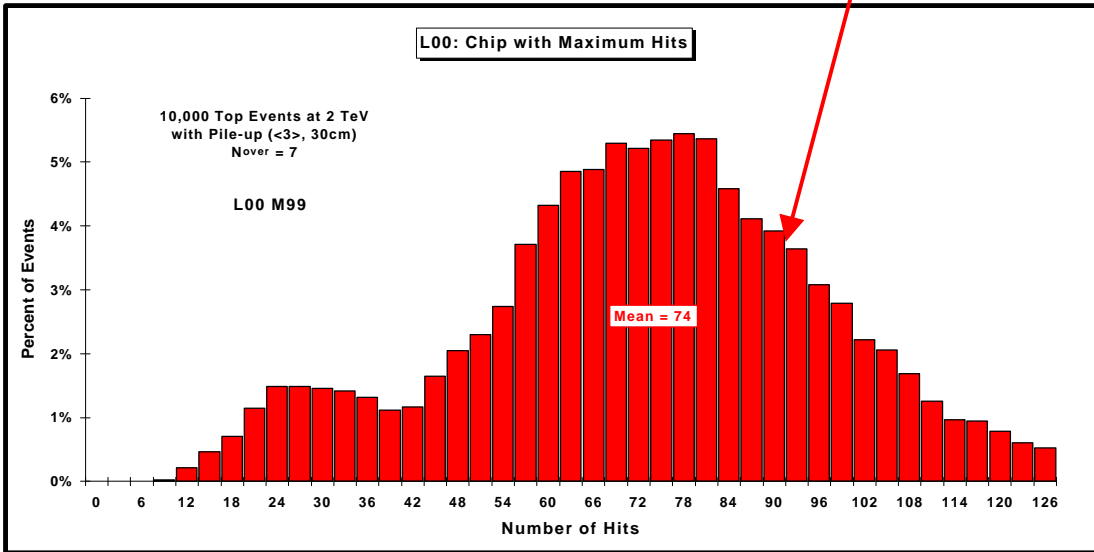
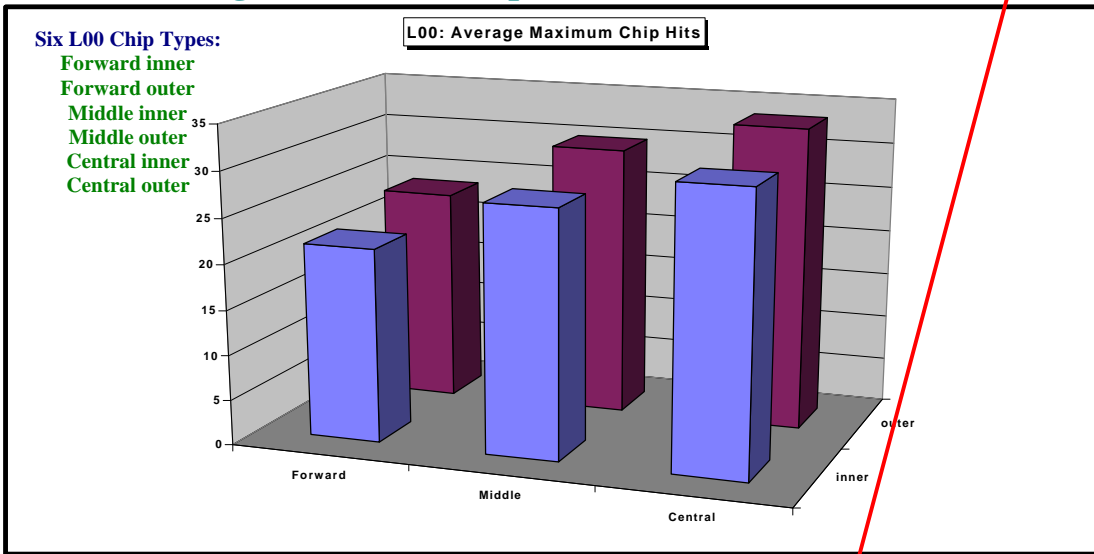
10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Chip with Maximum Hits:

L00: Average Maximum Chip Hits							
Radius	Forward	Middle	Central	Central	Middle	Forward	all
inner	22	27	31	31	27	21	
outer	24	30	33	33	29	23	
all							74

L00 M99 Average Maximum Chip Hits:

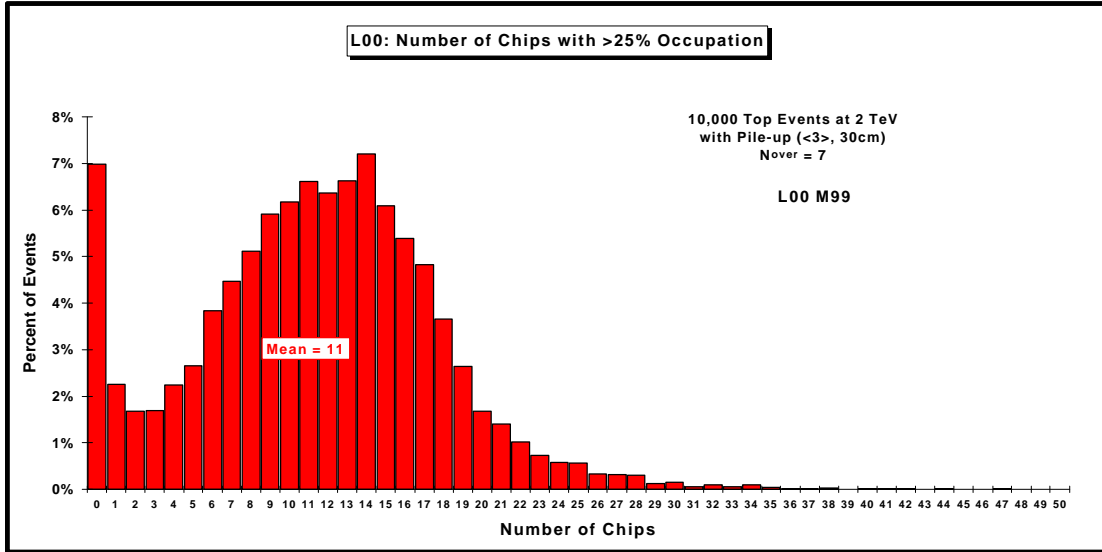
Read time of 3 μ s



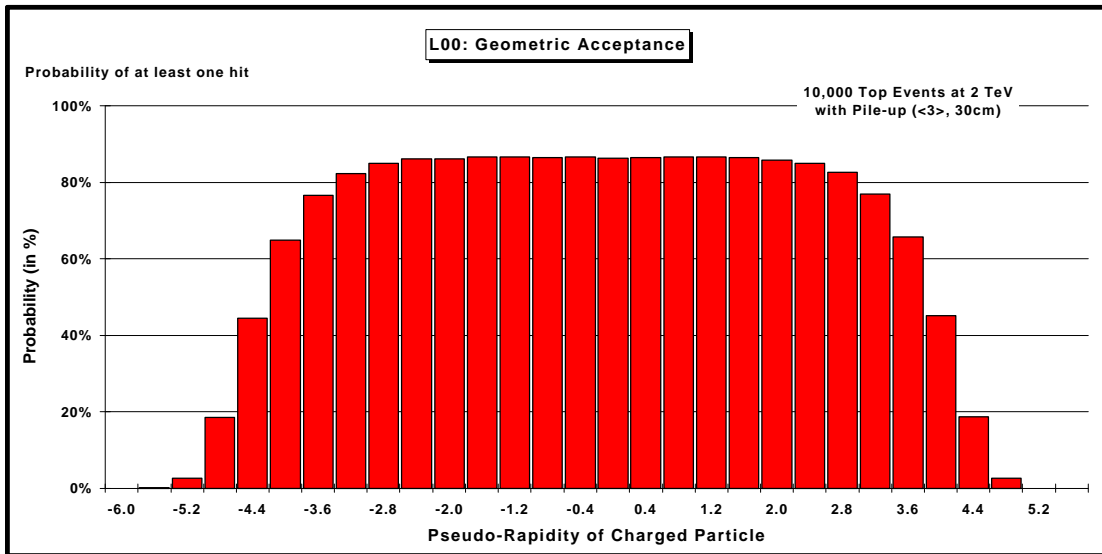
L00: Chips with Large Occupation

10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Number of Chips with > 25% Occupation:



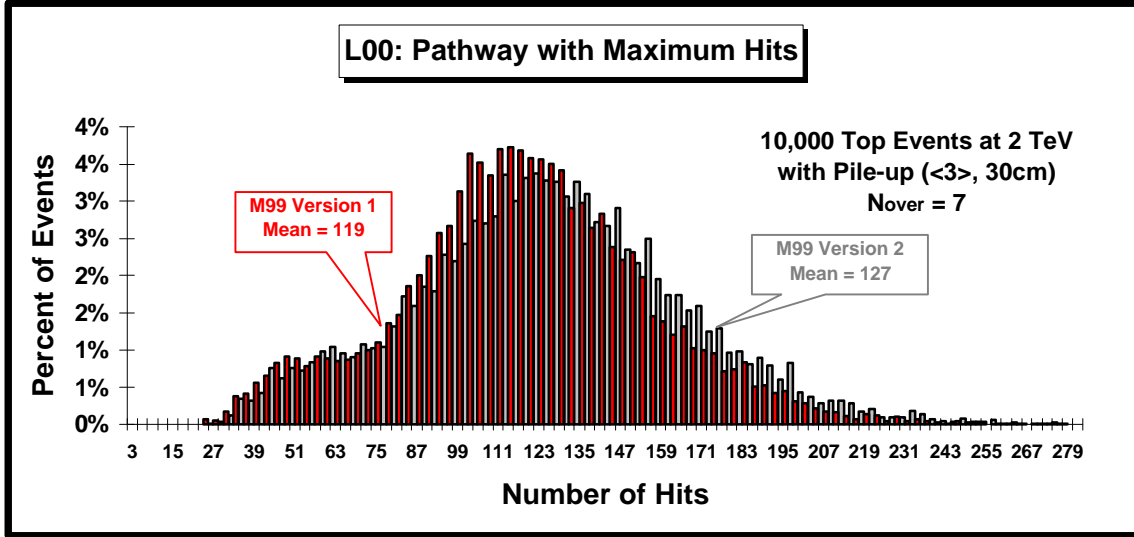
L00 M99 Geometric Acceptance (probability of at least one hit):



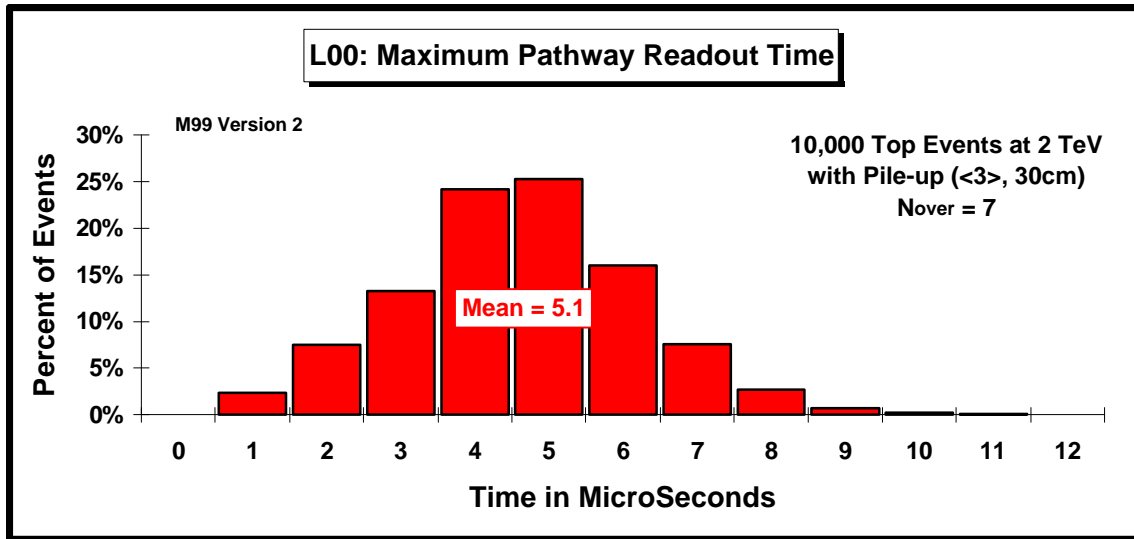
L00: M99 Pathway Information

10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Pathway with Maximum Hits:



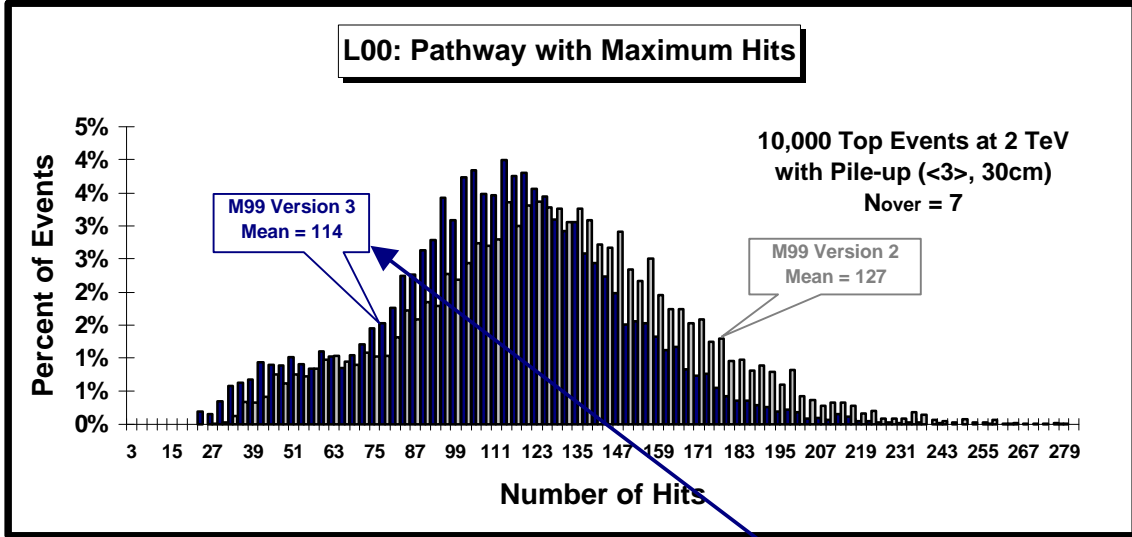
L00 M99 Version 2 Max Path Read Time:



L00: M99 Pathway Information

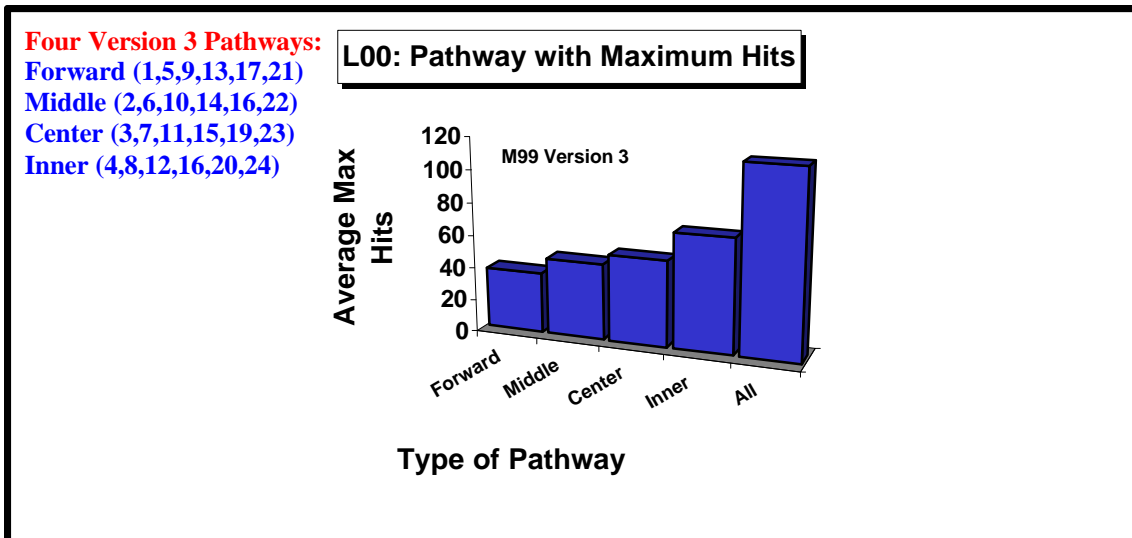
10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Pathway with Maximum Hits:



L00 M99 Version 3 Pathway with Maximum Hits:

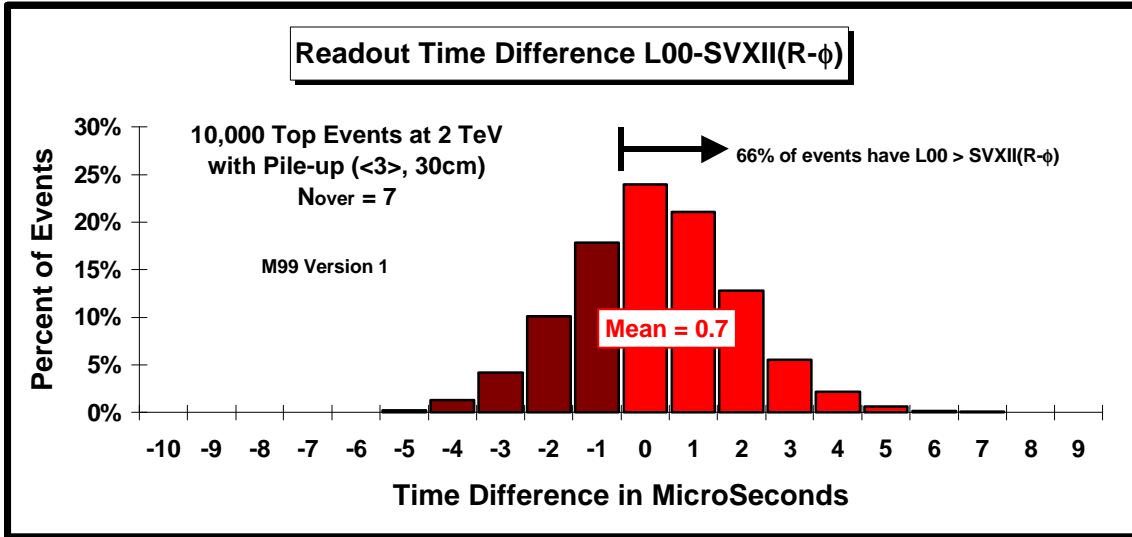
L00: M99 Version 3 Pathway with Maximum Hits								
Forward	Middle	Center	Inner	Inner	Central	Middle	Forward	all
37	47	53	70	69	53	46	37	114



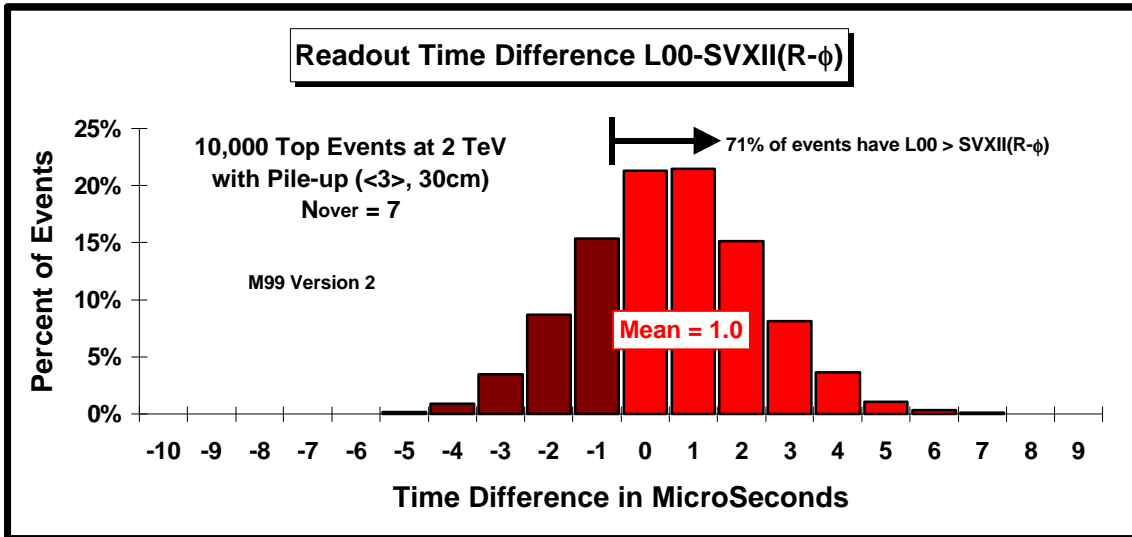
L00: Readout Time Comparison with SVXII

10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Version 1 Readout Time Difference L00-SVXII(R- ϕ) only):



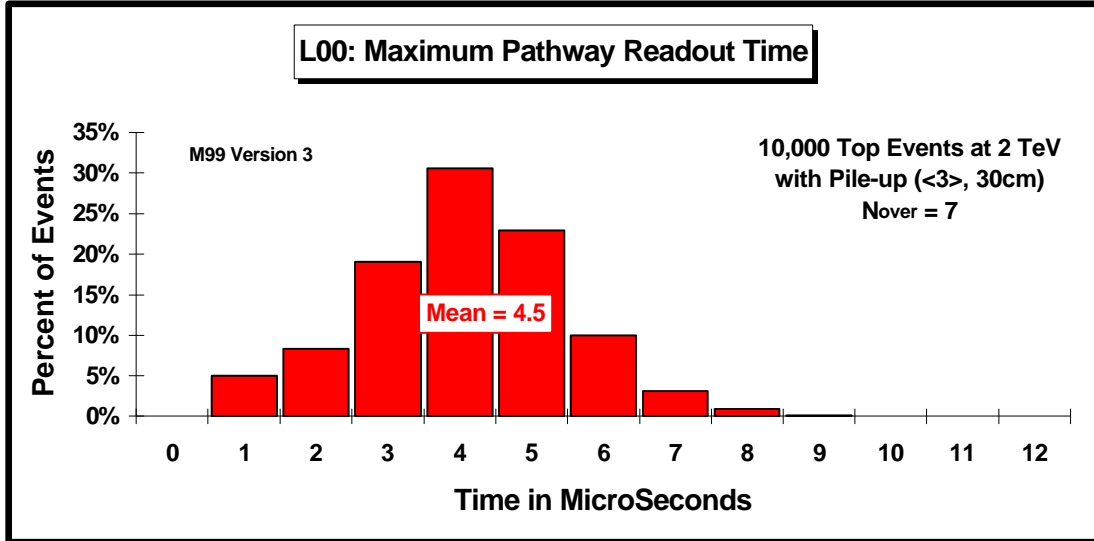
L00 M99 Version 2 Readout Time Difference L00-SVXII(R- ϕ) only):



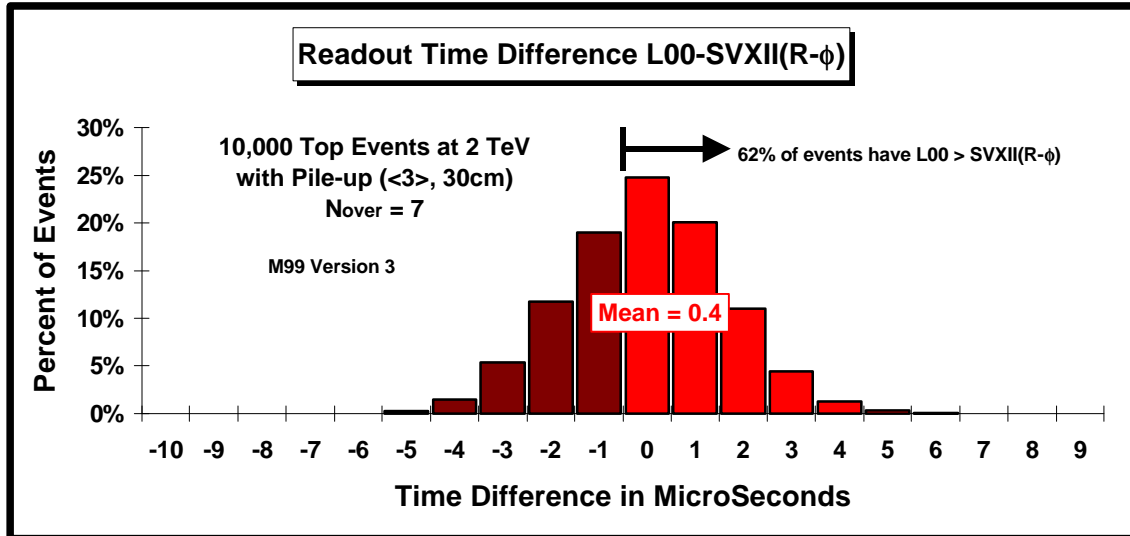
L00: Readout Time Comparison with SVXII

10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Version 3 Max Path Read Time:



L00 M99 Version 3 Readout Time Difference L00-SVXII(R-φ only):



L00: M99 Version 1 Group Information

10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

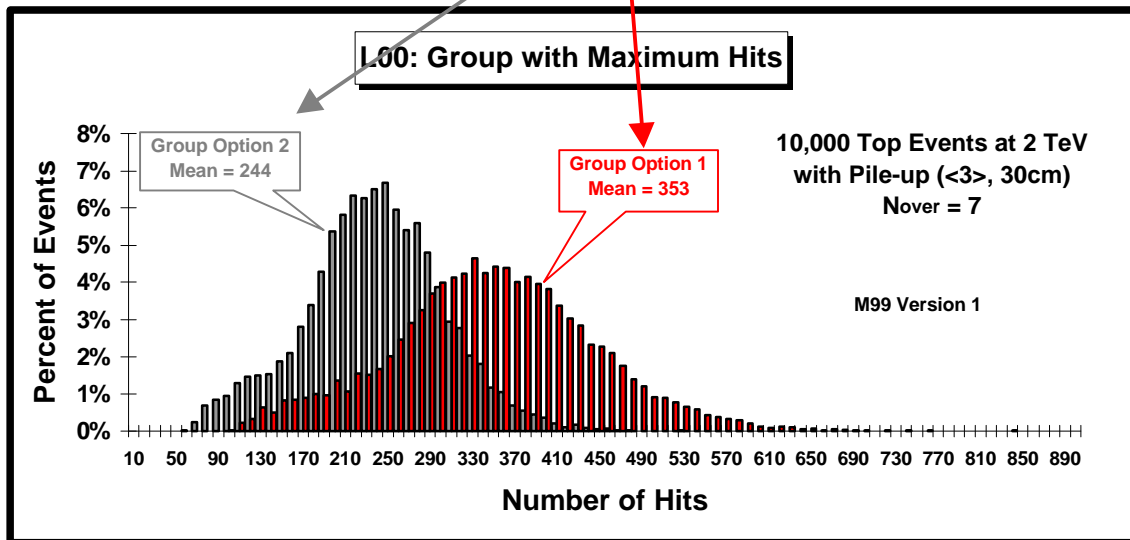
L00 M99 Version 1 Group Option 1:

L00: M99 Version 1 Group Option 1						
	Ave Hits	%Max	Max Hits	Paths/Chips	Max Path	Read Time
Group A	243	41.1%	354	5/15	71	14.2
Group B	242	42.0%	355	5/15	69	14.2
Group C	201	9.9%	346	4/12	69	13.8
Group D	200	7.1%	339	4/12	67	13.6
All Groups	1,772	100%	353	36/108	119	14.1

Ave Hits = Average total hits of the group; %Max = P_i = Probability that the group i had the maximum hits of all the groups; Max Hits = M_i = Average number of hits in group i when it was the group with maximum hits; The overall average maximum group hits is given by $\langle MaxHits \rangle = \sum P_i M_i$; Paths/Chips = Number of pathways/chips contributing to the group; Max Path = Average maximum pathway contribution to the group; Read Time = Readout time of the group when it was the group with maximum hits

L00 M99 Version 1 Group Option 2:

L00: M99 Version 1 Group Option 2						
	Ave Hits	%Max	Max Hits	Paths/Chips	Max Path	Read Time
Group A	148	16.4%	247	3/9	65	9.9
Group B	148	16.6%	244	3/9	65	9.7
Group C	148	16.7%	243	3/9	65	9.7
Group D	148	16.5%	242	3/9	65	9.7
Group E	148	16.8%	243	3/9	65	9.7
Group F	148	17.1%	244	3/9	65	9.7
All Groups	1,772	100%	244	36/108	119	9.7



L00: M99 Version 2 Group Information

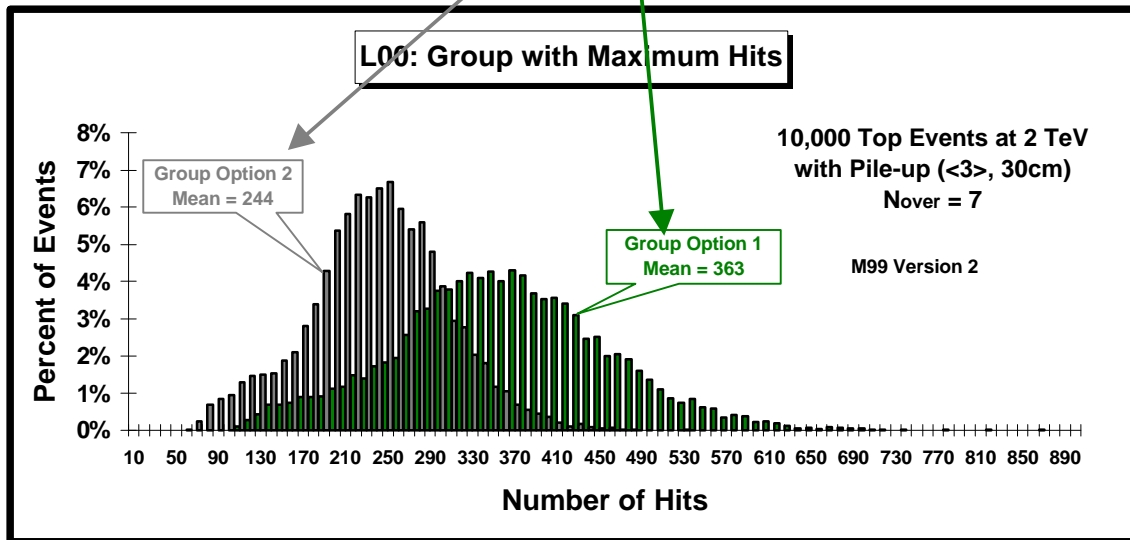
10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Version 2 Group Option 1:

L00: M99 Version 2 Group Option 1						
	Ave Hits	%Max	Max Hits	Paths/Chips	Max Path	Read Time
Group A	243	33.8%	359	5/15	77	14.4
Group B	258	55.6%	369	5/16	76	14.8
Group C	185	5.1%	347	4/11	71	13.9
Group D	200	5.6%	338	4/12	71	13.5
All Groups	1,772	100%	363	36/108	127	14.5

L00 M99 Version 2 Group Option 2 (same as version 1 group option 2):

L00: M99 Version 2 Group Option 2						
	Ave Hits	%Max	Max Hits	Paths/Chips	Max Path	Read Time
Group A	148	16.4%	247	3/9	69	9.9
Group B	148	16.6%	244	3/9	69	9.7
Group C	148	16.7%	243	3/9	69	9.7
Group D	148	16.5%	242	3/9	69	9.7
Group E	148	16.8%	243	3/9	69	9.7
Group F	148	17.1%	244	3/9	69	9.7
All Groups	1,772	100%	244	36/108	127	9.7



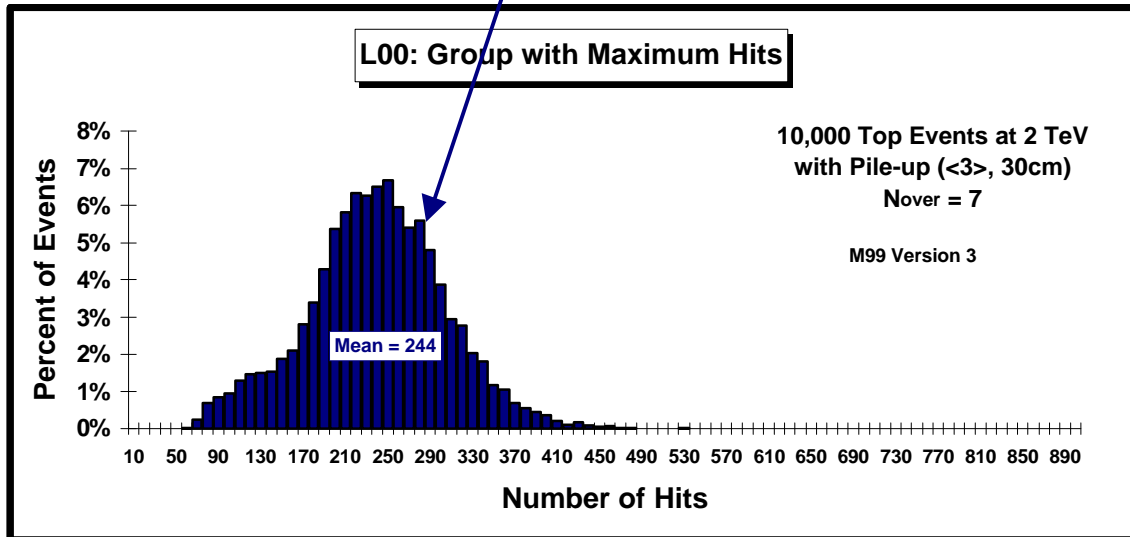
L00: M99 Version 3 Group Information

10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Version 3 Group Option 1 (same as version 2 group option 2):

L00: M99 Version 3 Group Option 1						
	Ave Hits	%Max	Max Hits	Paths/Chips	Max Path	Read Time
Group A	148	16.4%	247	4/9	60	9.9
Group B	148	16.6%	244	4/9	60	9.7
Group C	148	16.7%	243	4/9	60	9.7
Group D	148	16.5%	242	4/9	60	9.7
Group E	148	16.8%	243	4/9	60	9.7
Group F	148	17.1%	244	4/9	60	9.7
All Groups	1,772	100%	244	36/108	114	9.7

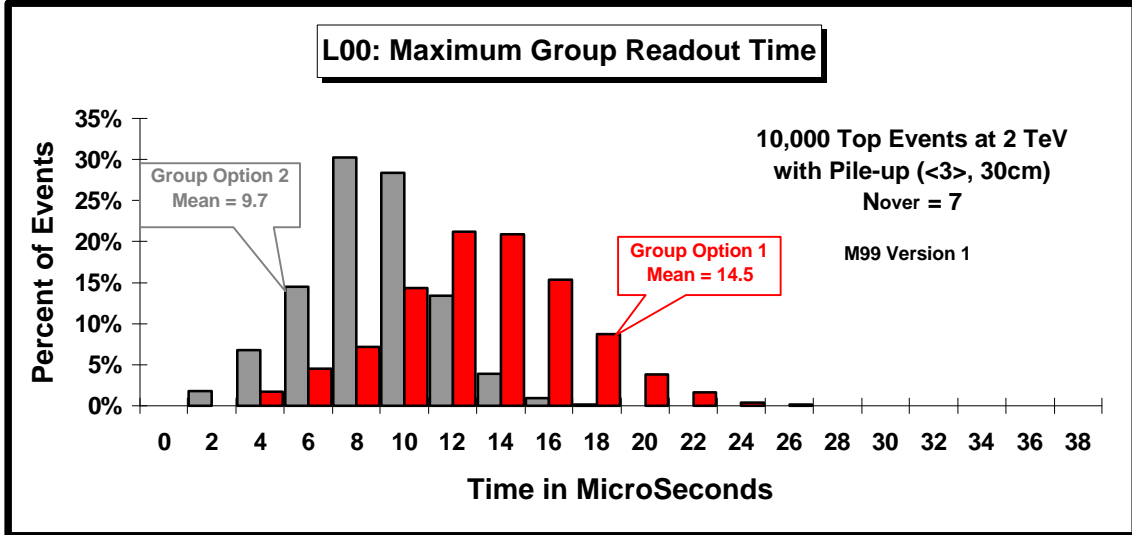
L00 M99 Version 3 Group Option 1 Group with Maximum Hits:



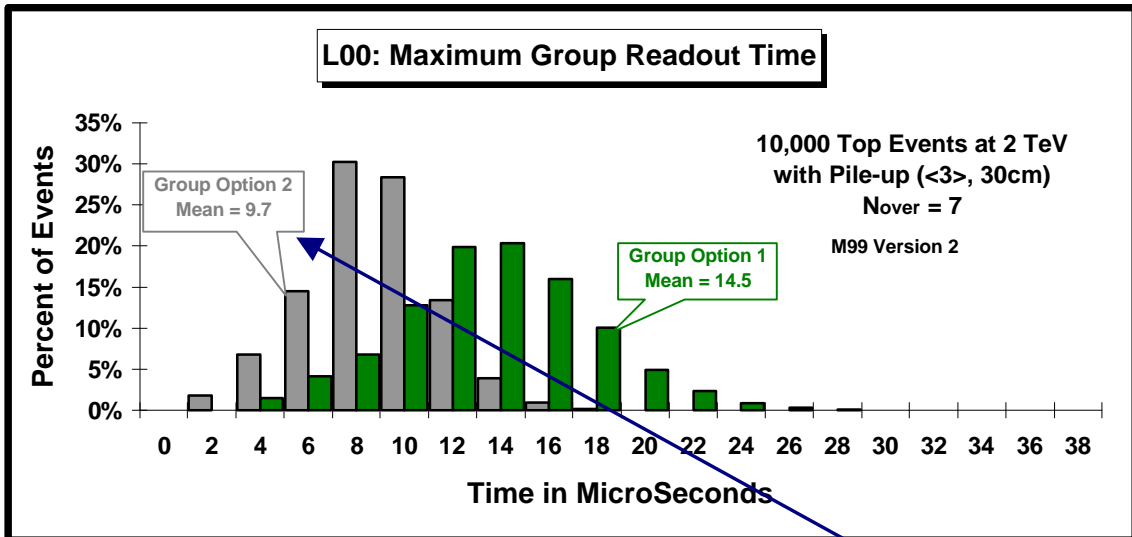
L00: M99 Group Readout Time

10,000 Top Events at 2 TeV with Pile-up (<3>, 30cm) Nover = 7

L00 M99 Version 1 Max Group Readout Time:



L00 M99 Version 2 Max Group Readout Time:



L00 M99 Version 3 Max Group Readout Time:

Note that the max group readout time for V3G1 is the same as V2G2.