$DCA~\Lambda(\bar{\Lambda})$

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		4 vs 5 mm			5 vs 6 mm			
	0-10%	2.709 e-04	1.940 e-04	No	8.225 e-03	5.836 e-03	No	
ΛK_S^0	10-30%	6.759 e-04	5.899 e-04	No	4.508 e-03	31.591 e-03	No	
	30-50%	9.913 e-02	42.821 e-02	No	1.884 e-01	0.700 e-02	Yes	
	0-10%	2.846 e-04	4.418 e-04	No	8.108 e-05	10.711 e-05	No	
$\bar{\Lambda} \mathrm{K}_S^0$	10-30%	3.324 e-04	14.472 e-04	No	1.329 e-02	4.550 e-02	No	
	30-50%	2.783 e-03	2.179 e-03	No	1.510 e-02	3.137 e-02	No	

Table 1: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA $\Lambda(\bar{\Lambda})$ caption

DCA $\Lambda(\bar{\Lambda})$ SimpleExp

() 1 1									
		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		4 vs 5 mm			5 vs 6 mm				
	0-10%	2.744 e-04	2.494 e-04	No	9.579 e-05	4.939 e-05	No		
ΛK_S^0	10-30%	1.227 e-03	1.489 e-03	No	8.714 e-05	3.236 e-05	Yes		
	30-50%	1.269 e-03	1.740 e-03	No	1.878 e-01	0.699 e-01	Yes		
	0-10%	7.551 e-05	5.648 e-05	No	6.570 e-05	1.593 e-05	Yes		
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	6.478 e-05	4.222 e-05	No	3.222 e-04	6.697 e-04	No		
	30-50%	2.055 e-02	2.563 e-02	No	3.299 e-03	2.714 e-03	No		

Table 2: $\Lambda(\bar{\Lambda})K^0_{\mathcal{S}}$ Analyses: DCA $\Lambda(\bar{\Lambda})$ caption

0.1 Systematic Errors: $\Lambda \mathbf{K}_{S}^{0}$

Talk about stuff

$DCA~\Lambda(\bar{\Lambda})$

ъ. т	G . 11.		Fit Results					
Pair Type	Centrality	A	В	С	Sig			
	I	l	4 vs 5 mm					
	0-10%	$2.709 \pm 1.940 \text{ e-}04$	$1.531 \pm 4.020 \text{ e} + 00$	$-1.004 \pm 3.031 \text{ e-}04$	No			
$\Lambda {\sf K}_S^0$	10-30%	$6.759 \pm 5.899 \text{ e-04}$	$3.834 \pm 4.817 \text{ e} + 00$	$1.195 \pm 1.309 \text{ e-04}$	No			
~	30-50%	$9.913 \pm 42.821 \text{ e-}02$	$9.782 \pm 43.696 \text{ e-03}$	$9.844 \pm 42.816 \text{ e-}02$	No			
	0-10%	$2.846 \pm 4.418 \text{ e-04}$	$8.631 \pm 7.200 \text{ e} + 00$	$-6.912 \pm 2.311 \text{ e-05}$	No			
$ar{\Lambda} ext{K}_S^0$	10-30%	$3.324 \pm 14.472 \text{ e-}04$	$9.543 \pm 84.997 \text{ e-}01$	$2.489 \pm 17.182 \text{ e-}04$	No			
~	30-50%	$2.783 \pm 2.179 \text{ e-03}$	$6.009 \pm 4.843 \text{ e} + 00$	$4.436 \pm 1.804 \text{ e-}04$	No			
			5 vs 6 mm	•				
	0-10%	8.225 ± 5.836 e-03	$4.683 \pm 2.083 \text{ e+01}$	$-7.929 \pm 1.566 \text{ e-05}$	No			
$\Lambda { m K}_S^0$	10-30%	$4.508 \pm 31.591 \text{ e-03}$	$3.350 \pm 23.967 \text{ e-}02$	$4.499 \pm 31.591 \text{ e-}03$	No			
	30-50%	$1.884 \pm 0.700 \text{ e-}01$	$1.265 \pm 0.289 \text{ e} + 02$	-1.571 ± 0.751 e-04	Yes			
	0-10%	8.108 ± 10.711 e-05	$2.062 \pm 5.974 \text{ e} + 00$	$-8.981 \pm 8.008 \mathrm{e}\text{-}05$	No			
$ar{\Lambda} ext{K}_S^0$	10-30%	$1.329 \pm 4.550 \text{ e-}02$	$3.045 \pm 11.469 \text{ e-}02$	$1.311 \pm 4.551 \text{ e-}02$	No			
	30-50%	$1.510 \pm 3.137 \text{ e-}02$	$7.268 \pm 16.222 \text{ e-}02$	$1.436 \pm 3.145 \text{ e-}02$	No			

Table 3: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA $\Lambda(\bar{\Lambda})$ caption

DCA K_S^0

		Fit Amplitudes					
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		2 vs 3 mm			3 vs 4 mm		
	0-10%	5.098 e-04	75.946 e-04	No	1.734 e-04	2.179 e-04	No
ΛK_S^0	10-30%	4.222 e-03	0.551 e-03	Yes	2.562 e-03	2.121 e-03	No
	30-50%	8.888 e-03	4.572 e-03	No	1.701 e-02	0.612 e-03	Yes
	0-10%	6.442 e-04	1.336 e-04	Yes	5.795 e-03	24.211 e-03	No
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	6.376 e-04	2.764 e-04	Yes	2.128 e-03	0.434 e-03	Yes
	30-50%	2.412 e-03	0.906 e-03	Yes	1.175 e-01	5.116 e-01	No

Table 4: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA K^0_S caption

DCA K_S SimpleExp

Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		2 vs 3 mm			3 vs 4 mm		
	0-10%	2.285 e-04	1.917 e-04	No	1.566 e-04	3.170 e-04	No
ΛK_S^0	10-30%	3.336 e-04	0.407 e-04	Yes	6.280 e-05	3.057 e-05	Yes
_	30-50%	7.842 e-03	4.208 e-03	No	1.721 e-02	0.623 e-02	Yes
	0-10%	2.195 e-04	0.209 e-04	Yes	1.195 e-04	0.156 e-04	Yes
$\bar{\Lambda} K_S^0$	10-30%	6.398 e-04	2.905 e-04	Yes	5.440 e-04	3.639 e-04	No
	30-50%	2.474 e-03	1.368 e-03	No	2.661 e-04	2.694 e-04	No

Table 5: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA K^0_S caption

DCA K_S^0

Doir Type	Centrality		Fit Results		
Pair Type	Centrality	A	В	С	Sig
			2 vs 3 mm		•
	0-10%	$5.098 \pm 75.946 \text{ e-}04$	$6.804 \pm 160.113 \text{ e-}01$	$3.403 \pm 81.962 \text{ e-}04$	No
ΛK_S^0	10-30%	4.222 ± 0.551 e-03	$9.473 \pm 4.523 \text{ e-}02$	4.314 ± 0.551 e-03	Yes
	30-50%	$8.888 \pm 4.572 \text{ e-03}$	$1.684 \pm 0.552 \text{ e+01}$	$-1.820 \pm 0.951 \text{ e-04}$	No
	0-10%	$6.442 \pm 1.336 \text{ e-}04$	$2.282 \pm 1.274 \text{ e+}00$	$3.984 \pm 1.133 \text{ e-04}$	Yes
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	$6.376 \pm 2.764 \text{ e-04}$	$2.416 \pm 3.012 \text{ e}+00$	$1.405 \pm 23.358 \text{ e-}05$	Yes
	30-50%	$2.418 \pm 0.906 \text{ e-03}$	$3.560 \pm 1.948 \text{ e} + 00$	$4.452 \pm 2.562 \text{ e-04}$	Yes
			3 vs 4 mm		
	0-10%	$1.734 \pm 2.179 \text{ e-}04$	$5.946 \pm 6.215 \text{ e} + 00$	$-2.434 \pm 2.157 \text{ e-05}$	No
ΛK_S^0	10-30%	$2.562 \pm 2.121 \text{ e-03}$	2.130 ± 0.965 e+01	$7.165 \pm 3.132 \text{ e-}05$	No
	30-50%	$1.701 \pm 0.612 \text{ e-}02$	$3.185 \pm 0.741 \text{ e+01}$	$1.334 \pm 0.703 \text{ e-}04$	Yes
	0-10%	$5.795 \pm 24.211 \text{ e-03}$	$3.631 \pm 16.060 \text{ e-}02$	$5.785 \pm 24.219 \text{ e-03}$	No
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	$2.128 \pm 0.434 \text{ e-03}$	1.873 ± 0.826 e-01	$1.876 \pm 0.434 \text{ e-}03$	Yes
	30-50%	$1.175 \pm 5.116 \text{ e-01}$	$-2.700 \pm 10.925 \text{ e-}03$	$1.172 \pm 5.115 \text{ e-01}$	No

Table 6: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA K^0_S caption

DCA $\Lambda(\bar{\Lambda})$ Daughters

		Fit Amplitudes						
Pair Type Cen	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		3 vs 4 mm			4 vs 5 mm			
	0-10%	2.521 e-04	2.924 e-04	No	1.855 e-04	2.245 e-04	No	
ΛK_S^0	10-30%	2.065 e-02	22.509 e-02	No	2.885 e-04	2.460 e-04	No	
	30-50%	9.063 e-02	8.577 e-02	No	8.807 e-02	22.461 e-02	No	
	0-10%	1.291 e-04	3.440 e-04	No	1.180 e-05	12.412 e-05	No	
$\bar{\Lambda} \mathrm{K}_S^0$	10-30%	9.701 e-03	9.174 e-03	No	4.654 e-02	32.002 e-02	No	
	30-50%	1.187 e-02	1.435 e-02	No	1.513 e-01	1.729 e-01	No	

Table 7: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA $\Lambda(\bar{\Lambda})$ Daughters

DCA $\Lambda(\bar{\Lambda})$ Daughters SimpleExp

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		3 vs 4 mm			4 vs 5 mm			
	0-10%	5.045 e-05	2.044 e-05	Yes	1.857 e-04	2.696 e-04	No	
ΛK_S^0	10-30%	1.623 e-04	0.417 e-04	Yes	4.511 e-05	3.336 e-05	No	
	30-50%	8.649 e-02	8.209 e-02	No	2.261 e-04	0.773 e-04	Yes	
	0-10%	3.701 e-05	5.523 e-05	No	4.478 e-05	5.365 e-05	No	
$\bar{\Lambda} K_S^0$	10-30%	1.721 e-04	0.430 e-04	Yes	3.055 e-04	1.227 e-04	Yes	
	30-50%	8.004 e-05	9.944 e-05	No	3.030 e-04	2.329 e-04	No	

Table 8: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA $\Lambda(\bar{\Lambda})$ Daughters

DCA $\Lambda(\bar{\Lambda})$ Daughters

			Fit Results		
Pair Type	Centrality				
J F		A	В	C	Sig
			3 vs 4 mm		
	0-10%	$2.521 \pm 2.924 \text{ e-}04$	$5.476 \pm 10.288 \text{ e-01}$	2.294 ± 3.016 e-04	No
$\Lambda { m K}_S^0$	10-30%	$2.065 \pm 22.509 \text{ e-}02$	$4.900 \pm 55.720 \text{ e-03}$	$2.075 \pm 22.508 \text{ e-}02$	No
	30-50%	$9.063 \pm 8.577 \text{ e-}02$	$1.637 \pm 1.260 \text{ e} + 02$	$-2.718 \pm 0.960 \text{ e-04}$	No
	0-10%	$1.291 \pm 3.440 \text{ e-}04$	$7.412 \pm 10.297 \text{ e} + 00$	$-3.342 \pm 2.448 \text{ e-05}$	No
$ar{\Lambda} ext{K}_S^0$	10-30%	$9.701 \pm 9.174 \text{ e-}03$	$4.055 \pm 2.013 \text{ e+01}$	1.761 ± 0.431 e-04	No
~	30-50%	$1.187 \pm 1.435 \text{ e-}02$	$3.199 \pm 2.137 \text{ e+01}$	$8.976 \pm 10.005 \text{ e-05}$	No
			4 vs 5 mm		
	0-10%	$1.855 \pm 2.245 \text{ e-04}$	$6.895 \pm 6.644 \text{ e} + 00$	$2.252 \pm 20.175 \text{ e-06}$	No
$\Lambda { m K}_S^0$	10-30%	$2.885 \pm 2.460 \text{ e-}04$	$2.843 \pm 3.397 \text{ e} + 00$	$1.036 \pm 0.950 \text{ e-}04$	No
-	30-50%	$8.807 \pm 22.461 \text{ e-}02$	$1.050 \pm 2.813 \text{ e-}02$	$-8.770 \pm 22.458 \text{ e-}02$	No
	0-10%	$1.180 \pm 12.412 \text{ e-}05$	$1.426 \pm 23.630 \text{ e} + 00$	$3.498 \pm 10.006 \text{ e-05}$	No
$ar{\Lambda} ext{K}_S^0$	10-30%	$4.654 \pm 32.002 \text{ e-}02$	$3.753 \pm 27.490 \text{ e-}03$	$4.623 \pm 32.003 \text{ e-}02$	No
	30-50%	$1.513 \pm 1.729 \text{ e-}01$	$1.438 \pm 0.900 \text{ e+}02$	$-2.817 \pm 0.793 \text{ e-04}$	No
	30-30%	1.313 ± 1.729 €-01	1.436 ± 0.900 €+02	-2.817 ± 0.793 E-04	110

Table 9: $\Lambda(\bar{\Lambda})K^0_{S}$ Analyses: DCA $\Lambda(\bar{\Lambda})$ Daughters

DCA K_S Daughters

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		2 vs 3 mm			3 vs 4 mm			
	0-10%	1.776 e-03	1.570 e-03	No	2.483 e-03	2.563 e-03	No	
ΛK_S^0	10-30%	1.195 e-01	0.603 e-01	No	1.214 e-03	1.265 e-03	No	
	30-50%	1.394 e-01	0.548 e-01	Yes	1.196 e-03	1.962 e-03	No	
	0-10%	2.234 e-03	1.729 e-03	No	2.695 e-03	5.304 e+02	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	5.343 e-04	5.054 e-04	No	1.431 e-02	10.457 e-02	No	
	30-50%	2.720 e-02	1.860 e-02	No	3.780 e-03	2.364 e-03	No	

Table 10: $\Lambda(\bar{\Lambda})K^0_{S}$ Analyses: DCA K^0_{S} Daughters

DCA K_S⁰ Daughters SimpleExp

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		2 vs 3 mm			3 vs 4 mm			
	0-10%	1.261 e-03	1.161 e-03	No	2.395 e-03	2.508 e-03	No	
ΛK_S^0	10-30%	1.361 e-04	0.461 e-04	Yes	1.640 e-03	1.581 e-03	No	
	30-50%	1.397 e-01	0.549 e-01	Yes	1.168 e+01	5.857 e+01	No	
	0-10%	3.649 e-03	2.544 e-03	No	6.439 e-05	1.849 e-05	Yes	
$\bar{\Lambda} K_S^0$	10-30%	2.648 e-04	0.475 e-04	Yes	5.477 e-04	8.515 e-04	No	
	30-50%	2.814 e-02	1.870 e-02	No	3.439 e-04	0.839 e-04	Yes	

Table 11: $\Lambda(\bar{\Lambda})K^0_{S}$ Analyses: DCA K^0_{S} Daughters

DCA K_S Daughters

Pair Type	Centrality		Fit Results						
ran Type	Centrality	A	В	С	Sig				
			2 vs 3 mm	2 vs 3 mm					
	0-10%	$1.776 \pm 1.570 \text{ e-03}$	1.444 ± 0.851 e+01	$-2.631 \pm 2.560 \text{ e-05}$	No				
ΛK_S^0	10-30%	$1.195 \pm 0.603 \text{ e-01}$	$2.959 \pm 1.740 \mathrm{e}{+02}$	1.370 ± 0.461 e-04	No				
	30-50%	$1.394 \pm 0.548 \text{ e-}01$	$8.502 \pm 2.151 \text{ e+01}$	$3.684 \pm 10.441 \text{ e-05}$	Yes				
	0-10%	$2.234 \pm 1.729 \text{ e-03}$	$1.382 \pm 0.742 \text{ e+01}$	$1.025 \pm 0.273 \text{ e-04}$	No				
$\bar{\Lambda} K_S^0$	10-30%	$5.343 \pm 5.054 \text{ e-04}$	$3.826 \pm 4.224 \text{ e} + 00$	$3.346 \pm 1.056 \text{ e-}04$	No				
	30-50%	$2.720 \pm 1.860 \text{ e-}02$	$2.999 \pm 1.294 \text{ e+01}$	$5.355 \pm 10.939 \text{ e-05}$	No				
			3 vs 4 mm						
	0-10%	$2.483 \pm 2.563 \text{ e-03}$	$2.896 \pm 1.703 \text{ e+01}$	$-1.024 \pm 1.820 \text{ e-05}$	No				
ΛK_S^0	10-30%	$1.214 \pm 1.265 \text{ e-03}$	$8.316 \pm 6.912 \text{ e}+00$	$3.880 \pm 5.009 \text{ e-05}$	No				
	30-50%	1.196 ± 1.962 e-03	$5.262 \pm 10.152 \text{ e} + 00$	$2.306 \pm 2.127 \text{ e-}04$	No				
	0-10%	$2.695 \text{ e-}03 \pm 5.304 \text{ e+}02$	$4.558 \pm 0.100 \mathrm{e}$ +01	$-5.972 \text{ e-}05 \pm 5.304 \text{ e+}02$	No				
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	$1.431 \pm 10.457 \text{ e-}02$	$1.397 \pm 10.705 \text{ e-}02$	$1.417 \pm 10.457 \text{ e-}02$	No				
	30-50%	$3.780 \pm 2.364 \text{ e-03}$	$6.838 \pm 3.823 \text{ e+00}$	$5.087 \pm 1.398 \text{ e-04}$	No				

Table 12: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA K^0_S Daughters

$\Lambda(\bar{\Lambda})$ Cosine of Pointing Angle

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.9992 vs 0.9993			0.9993 vs 0.9994			
	0-10%	4.736 e-03	2.311 e-03	Yes	1.700 e-02	7.601 e-02	No	
ΛK_S^0	10-30%	5.172 e-03	2.253 e-03	Yes	1.154 e-04	1.586 e+02	No	
	30-50%	3.862 e-03	1.806 e-03	Yes	5.883 e-03	1.638 e-03	Yes	
	0-10%	1.141 e-03	1.203 e-03	No	1.612 e-03	18.748 e-03	No	
$\bar{\Lambda} \mathrm{K}_S^0$	10-30%	3.518 e-04	3.120 e-04	No	9.358 e-03	66.281 e-03	No	
	30-50%	2.669 e-03	1.312 e-03	Yes	4.334 e-04	97.026 e-04	No	

Table 13: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: $\Lambda(\bar{\Lambda})$ Cosine of Pointing Angle

$\Lambda(\bar{\Lambda})$ Cosine of Pointing Angle SimpleExp

			Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		0.9992 vs 0.9993		0.9993 vs 0.9994					
	0-10%	4.733 e-03	2.309 e-03	Yes	2.720 e-03	524.319 e-03	No		
$\Lambda \mathrm{K}^0_S$	10-30%	5.201 e-03	2.269 e-03	Yes	6.453 e-05	5.364 e-05	No		
	30-50%	1.248 e-04	0.343 e-04	Yes	5.450 e-03	1.503 e-03	Yes		
	0-10%	2.318 e-05	0.778 e-05	Yes	6.065 e-05	6.332 e-05	No		
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	3.206 e-04	2.932 e-04	No	4.932 e-05	1.728 e-05	Yes		
	30-50%	4.297 e-04	1.609 e-04	Yes	1.165 e-04	0.402 e-04	Yes		

Table 14: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: $\Lambda(\bar{\Lambda})$ Cosine of Pointing Angle

$\Lambda(\bar{\Lambda})$ Cosine of Pointing Angle

Pair Type	Centrality		Fit Results		
ran Type	Centrality	A	В	С	Sig
			0.9992 vs 0.9993		
	0-10%	$4.736 \pm 2.311 \text{ e-03}$	5.371 ± 1.591 e+01	$3.199 \pm 73.851 \text{ e-}07$	Yes
$\Lambda { m K}_S^0$	10-30%	$5.173 \pm 2.253 \text{ e-03}$	$3.652 \pm 0.903 \text{ e+01}$	$-8.830 \pm 14.773 \text{ e-}06$	Yes
~	30-50%	$3.862 \pm 1.806 \text{ e-}03$	1.510 ± 0.468 e+01	-1.554 ± 0.366 e-04	Yes
	0-10%	$1.141 \pm 1.203 \text{ e-03}$	$2.973 \pm 1.893 \text{ e+01}$	$-2.454 \pm 0.789 \text{ e-05}$	No
$ar{\Lambda} ext{K}_S^0$	10-30%	$3.518 \pm 3.120 \text{ e-04}$	$8.634 \pm 4.485 \text{ e} + 00$	$2.553 \pm 1.752 \text{ e-05}$	No
~	30-50%	$2.669 \pm 1.312 \text{ e-}03$	$1.210 \pm 0.408 \text{ e+01}$	$2.493 \pm 0.387 \text{ e-}04$	Yes
			0.9993 vs 0.9994		
	0-10%	1.700 ± 7.601 e-02	$3.750 \pm 17.309 \text{ e-03}$	-1.697 ± 7.601 e-02	No
$\Lambda { m K}_S^0$	10-30%	$1.154 \text{ e-}02 \pm 1.586 \text{ e+}02$	$1.437 \pm 0.100 \mathrm{e}$ +01	$-3.389 \text{ e-}05 \pm 1.586 \text{ e+}02$	No
	30-50%	$5.883 \pm 1.638 \text{ e-03}$	$1.435 \pm 0.282 \text{ e+01}$	$7.139 \pm 4.076 \text{ e-}05$	Yes
	0-10%	$3.554 \pm 18.748 \text{ e-03}$	$1.612 \pm 8.460 \text{ e-}02$	$3.510 \pm 18.736 \text{ e-}00$	No
$ar{\Lambda} { m K}_S^0$	10-30%	$9.358 \pm 66.281 \text{ e-03}$	$6.983 \pm 50.7020 \text{ e-}03$	$9.366 \pm 66.270 \text{ e-}03$	No
~	30-50%	$4.334 \pm 95.281 \text{ e-04}$	$-3.272 \pm 891.578 \text{ e-}01$	$4.686 \pm 97.026 \text{ e-}04$	No

Table 15: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: $\Lambda(\bar{\Lambda})$ Cosine of Pointing Angle

K_S⁰ Cosine of Pointing Angle

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.9992 vs 0.9993			0.9993 vs 0.9994			
	0-10%	3.192 e-04	4.037 e-04	No	7.957 e-04	5.050 e-04	No	
ΛK_S^0	10-30%	2.184 e-02	13.545 e-02	No	5.937 e-03	44.836 e-03	No	
	30-50%	3.489 e-04	3.645 e-04	No	1.182 e-01	2.429 e-01	No	
	0-10%	5.974 e-04	4.142 e-04	No	6.145 e-04	4.107 e-04	No	
$\bar{\Lambda} \mathrm{K}_S^0$	10-30%	4.988 e-03	2.080 e-03	Yes	1.610 e-03	1.412 e-03	No	
	30-50%	5.806 e-02	12.703 e-02	No	9.421 e-04	4.946 e-04	No	

Table 16: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: K^0_S Cosine of Pointing Angle

K_S⁰ Cosine of Pointing Angle SimpleExp

		Fit Amplitudes					
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		0.9992 vs 0.9993			0.9993 vs 0.9994		
	0-10%	3.209 e-04	4.053 e-04	No	2.184 e-04	2.188 e-04	No
ΛK_S^0	10-30%	1.491 e-03	2.069 e-03	No	5.593 e-05	2.241 e-05	Yes
	30-50%	3.328 e-04	6.564 e-04	No	3.971 e-04	0.502 e-04	Yes
	0-10%	6.409 e-04	4.583 e-04	No	2.956 e-05	1.153 e-05	Yes
$\bar{\Lambda} K_S^0$	10-30%	1.662 e-04	0.201 e-04	Yes	6.241 e-05	2.570 e-05	Yes
	30-50%	1.302 e-04	3.166 e-04	No	2.182 e-04	0.515 e-04	Yes

Table 17: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: K^0_S Cosine of Pointing Angle

K_S⁰ Cosine of Pointing Angle

		1			
Pair Type	Centrality		Fit Results		
Tan Type	Centrality	A	В	C	Sig
			0.9992 vs 0.9993	3	
	0-10%	$3.192 \pm 4.037 \text{ e-}04$	$1.181 \pm 0.834 \text{ e+01}$	$2.045 \pm 10.926 \text{ e-}06$	No
ΛK_S^0	10-30%	$2.184 \pm 13.545 \text{ e-}02$	$4.763 \pm 31.816 \text{ e-03}$	$2.180 \pm 13.545 \text{ e-}02$	No
	30-50%	$3.489 \pm 3.645 \text{ e-}04$	$2.601 \pm 5.446 \text{ e} + 00$	$8.672 \pm 19.368 \text{ e-05}$	No
	0-10%	$5.974 \pm 4.142 \text{ e-}04$	1.049 ± 0.467 e+01	-7.845 ± 11.711 e-06	No
$\bar{\Lambda} K_S^0$	10-30%	$4.988 \pm 2.080 \text{ e-03}$	$2.110 \pm 0.517 \text{ e+01}$	$1.558 \pm 0.206 \text{ e-04}$	Yes
	30-50%	$5.806 \pm 12.703 \text{ e-}02$	$9.468 \pm 19.603 \text{ e-03}$	$5.774 \pm 12.694 \text{ e-}02$	No
			0.9993 vs 0.9994	1	
	0-10%	$7.957 \pm 5.050 \text{ e-04}$	1.140 ± 0.452 e+01	$3.247 \pm 1.257 \text{ e-05}$	No
ΛK_S^0	10-30%	$5.937 \pm 44.836 \text{ e-}03$	$2.504 \pm 19.843 \text{ e-}02$	$5.896 \pm 44.840 \text{ e-03}$	No
	30-50%	$1.182 \pm 2.429 \text{ e-}01$	$5.142 \pm 10.645 \text{ e-03}$	$1.182 \pm 2.429 \text{ e-}01$	No
	0-10%	$6.145 \pm 4.107 \text{ e-}04$	1.212 ± 0.563 e+01	-3.545 ± 1.266 e-05	No
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	1.610 ± 1.411 e-03	$1.523 \pm 0.753 \text{ e+01}$	$5.427 \pm 2.372 \text{ e-05}$	No
	30-50%	$9.421 \pm 4.946 \text{ e-}04$	$1.602 \pm 3.804 \text{ e+00}$	$5.656 \pm 9.012 \text{ e-04}$	No

Table 18: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: K^0_S Cosine of Pointing Angle

DCA to Primary Vertex of $p^+(\bar{p}^-)$ Daughter of $\Lambda(\bar{\Lambda})$

			Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		0.5 vs 1 mm			1 vs 2 mm				
	0-10%	0.000 e-00	0.000 e-00	No	1.197 e-03	0.987 e-03	No		
ΛK_S^0	10-30%	1.567 e-07	18.945 e-07	No	8.125 e-04	12.816 e-04	No		
	30-50%	0.000 e-00	0.000 e-00	No	5.361 e-03	6.412 e-03	No		
	0-10%	0.000 e-00	0.000 e-00	No	2.369 e-04	4.189 e-04	No		
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	0.000 e-00	0.000 e-00	No	6.808 e-02	53.271 e-02	No		
	30-50%	0.000 e-00	0.000 e-00	No	5.296 e-03	2.603 e-03	Yes		

Table 19: $\Lambda(\bar{\Lambda})K_S^0$ Analyses: DCA to Primary Vertex of $p^+(\bar{p}^-)$ Daughter of $\Lambda(\bar{\Lambda})$

DCA to Primary Vertex of $p^+(\bar{p}^-)$ Daughter of $\Lambda(\bar{\Lambda})$ SimpleExp

	1							
		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.5 vs 1 mm			1 vs 2 mm			
	0-10%	0.000 e-00	0.000 e-00	No	2.627 e-03	2.488 e-03	No	
ΛK_S^0	10-30%	1.542 e-07	3.999 e-07	No	1.947 e-04	0.737 e-04	Yes	
	30-50%	0.000 e-00	0.000 e-00	No	5.955 e-03	7.515 e-03	No	
	0-10%	0.000 e-00	0.000 e-00	No	2.431 e-04	4.365 e-04	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	0.000 e-00	0.000 e-00	No	3.454 e-04	0.750 e-04	Yes	
	30-50%	0.000 e-00	0.000 e-00	No	8.376 e-04	17.096 e-04	No	

Table 20: $\Lambda(\bar{\Lambda})K_S^0$ Analyses: DCA to Primary Vertex of $p^+(\bar{p}^-)$ Daughter of $\Lambda(\bar{\Lambda})$

DCA to Primary Vertex of $p^+(\bar{p}^-)$ Daughter of $\Lambda(\bar{\Lambda})$

Pair Type	Centrality		Fit Results		
ran Type	Centrality	A	В	С	Sig
			0.5 vs 1 mm		
	0-10%	0.000 ± 0.000 e-00	0.000 ± 0.000 e+00	0.000 ± 0.000 e-00	No
ΛK_S^0	10-30%	$1.567 \pm 18.945 \text{ e-}07$	$6.123 \pm 61.022 \text{ e} + 00$	1.162 ± 1.517 e-07	No
	30-50%	0.000 ± 0.000 e-00	$0.000 \pm 0.000 \text{ e+}00$	0.000 ± 0.000 e-00	No
	0-10%	0.000 ± 0.000 e-00	0.000 ± 0.000 e+00	0.000 ± 0.000 e-00	No
$ar{\Lambda} \mathrm{K}^0_S$	10-30%	0.000 ± 0.000 e-00	0.000 ± 0.000 e+00	0.000 ± 0.000 e-00	No
	30-50%	0.000 ± 0.000 e-00	$0.000 \pm 0.000 \text{ e+00}$	0.000 ± 0.000 e-00	No
			1 vs 2 mm		
	0-10%	$1.197 \pm 0.987 \text{ e-}03$	$6.665 \pm 4.871 \text{ e} + 00$	$1.496 \pm 0.593 \text{ e-04}$	No
$\Lambda \mathrm{K}^0_S$	10-30%	$8.125 \pm 12.816 \mathrm{e}\text{-}04$	$7.109 \pm 6.921 \text{ e} + 00$	2.257 ± 0.888 e-04	No
	30-50%	$5.361 \pm 6.412 \text{ e-03}$	$9.367 \pm 7.970 \text{ e}+00$	$-4.717 \pm 2.204 \text{ e}-04$	No
	0-10%	$2.369 \pm 4.189 \text{ e-04}$	$4.201 \pm 8.183 \text{ e} + 00$	1.531 ± 7.222 e-05	No
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	$6.808 \pm 53.271 \text{ e-}02$	$4.087 \pm 33.681 \text{ e-03}$	$-6.825 \pm 53.271 \text{ e-}02$	No
	30-50%	$5.296 \pm 2.603 \text{ e-03}$	3.155 ± 2.666 e-01	$4.480 \pm 2.617 \text{ e-}03$	Yes

Table 21: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA to Primary Vertex of $p^+(\bar{p}^-)$ Daughter of $\Lambda(\bar{\Lambda})$

DCA to Primary Vertex of $\pi^-(\pi^+)$ Daughter of $\Lambda(\bar{\Lambda})$

		Fit Amplitudes					
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		2 vs 3 mm			3 vs 4 mm		
	0-10%	8.432 e-04	9.717 e-04	No	7.591 e-05	11.555 e-05	No
ΛK_S^0	10-30%	1.287 e-04	1.797 e-04	No	3.352 e-04	3.326 e-04	No
	30-50%	1.345 e-02	0.950 e-02	No	6.001 e-03	4.808 e-03	No
	0-10%	1.051 e-04	0.945 e-04	No	7.565 e-05	9.354 e-05	No
$\bar{\Lambda} \mathrm{K}_S^0$	10-30%	2.201 e-02	1.242 e-02	No	2.012 e-04	19.216 e-04	No
	30-50%	1.652 e-02	23.238 e-02	No	1.348 e-01	8.053 e-01	No

Table 22: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA to Primary Vertex of $\pi^-(\pi^+)$ Daughter of $\Lambda(\bar{\Lambda})$

DCA to Primary Vertex of $\pi^-(\pi^+)$ Daughter of $\Lambda(\bar{\Lambda})$ SimpleExp

		Fit Amplitudes					
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		2 vs 3 mm			3 vs 4 mm		
	0-10%	4.071 e-05	1.292 e-05	Yes	7.267 e-05	9.759 e-05	No
ΛK_S^0	10-30%	3.802 e-05	1.986 e-05	No	7.270 e-05	2.580 e-05	Yes
	30-50%	7.601 e-04	4.585 e-04	No	6.004 e-03	4.800 e-03	No
	0-10%	7.057 e-05	0.993 e-05	Yes	6.916 e-05	8.861 e-05	No
$\bar{\Lambda} K_S^0$	10-30%	7.893 e-05	2.044 e-05	Yes	1.626 e-04	1.068 e-04	No
	30-50%	2.229 e-04	0.489 e-04	Yes	2.199 e-04	2.354 e-04	No

Table 23: $\Lambda(\bar{\Lambda})K_S^0$ Analyses: DCA to Primary Vertex of $\pi^-(\pi^+)$ Daughter of $\Lambda(\bar{\Lambda})$

DOA D TI	c (_+	\ D 1 (C A	/ A \
DCA to Primary Vert	exot π $\iota\pi$	1 Daughter of A	(/\ \
DC11 to 1 minuty vert	$CA OI \mathcal{H} (\mathcal{H})$	I Daugner of A	(1 L)

D.: T.	C 1'		Fit Results							
Pair Type	Centrality	A	В	С	Sig					
	2 vs 3 mm									
	0-10%	$8.432 \pm 9.717 \text{ e-04}$	2.697 ± 1.565 e+01	4.195 ± 0.971 e-05	No					
ΛK_S^0	10-30%	$1.287 \pm 1.797 \text{ e-}04$	$3.467 \pm 5.923 \text{ e}+00$	$5.775 \pm 4.664 \text{ e-}05$	No					
3	30-50%	$1.345 \pm 0.950 \text{ e-}02$	3.221 ± 1.611 e+01	$1.978 \pm 0.479 \text{ e-}04$	No					
	0-10%	$1.051 \pm 0.945 \text{ e-}04$	$3.426 \pm 4.394 \text{ e} + 00$	$8.710 \pm 2.702 \text{ e-05}$	No					
$\bar{\Lambda} K_S^0$	10-30%	$2.201 \pm 1.242 \text{ e-}02$	$1.060 \pm 0.509 \text{ e} + 02$	$7.786 \pm 2.044 \text{ e-}05$	No					
	30-50%	$1.652 \pm 23.238 \text{ e-}02$	$9.057 \pm 132.782 \text{ e-03}$	$1.665 \pm 23.241 \text{ e-}02$	No					
			3 vs 4 mm							
	0-10%	$7.591 \pm 11.555 \text{ e-}05$	$3.928 \pm 6.327 \text{ e+00}$	$-5.551 \pm 23.437 \text{ e-}06$	No					
ΛK_S^0	10-30%	$3.352 \pm 3.326 \text{ e-04}$	$1.243 \pm 2.959 \text{ e} + 00$	$2.305 \pm 4.076 \text{ e-04}$	No					
	30-50%	$6.001 \pm 4.808 \text{ e-03}$	$2.202 \pm 0.649 \text{ e+01}$	$4.662 \pm 64.917 \text{ e-}06$	No					
	0-10%	$7.565 \pm 9.354 \text{ e-}05$	$1.645 \pm 5.776 \text{ e} + 00$	$1.587 \pm 11.274 \text{ e-}05$	No					
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	$2.012 \pm 19.216 \text{ e-04}$	$6.442 \pm 95.119 \text{ e-01}$	$4.261 \pm 205.741 \text{ e-}05$	No					
	30-50%	$1.348 \pm 8.053 \text{ e-01}$	$3.340 \pm 22.536 \text{ e-03}$	$1.344 \pm 8.054 \text{ e-}01$	No					

Table 24: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA to Primary Vertex of $\pi^-(\pi^+)$ Daughter of $\Lambda(\bar{\Lambda})$

DCA to Primary Vertex of π^+ Daughter of K_S^0

		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		2 vs 3 mm			3 vs 4 mm				
	0-10%	6.389 e-03	26.374 e-03	No	4.199 e-02	6.327 e-02	No		
ΛK_S^0	10-30%	4.661 e-02	21.838 e-02	No	2.701 e-02	9.611 e-02	No		
	30-50%	1.780 e-03	2.167 e-03	No	9.225 e-02	5.533 e-02	No		
	0-10%	4.010 e-04	4.972 e-04	No	1.898 e-02	8.318 e-02	No		
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	2.010 e-04	2.337 e-04	No	2.234 e-02	10.938 e-01	No		
	30-50%	5.327 e-02	14.932 e-02	No	3.745 e-04	13.736 e-04	No		

Table 25: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA to Primary Vertex of π^+ Daughter of K^0_S

DCA to Primary Vertex of π^+ Daughter of K_S^0 SimpleExp

				1°.4 A	1', 1				
Pair Type		Fit Amplitudes							
	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		2 vs 3 mm			3 vs 4 mm				
	0-10%	9.442 e-05	1.482 e-05	Yes	1.579 e-04	0.168 e-04	Yes		
ΛK_S^0	10-30%	1.162 e-04	0.312 e-04	Yes	8.443 e-05	3.562 e-05	Yes		
	30-50%	1.475 e-03	1.223 e-03	No	3.713 e-04	3.997 e-04	No		
	0-10%	8.044 e-04	12.068 e-04	No	2.189 e-04	1.488 e-04	No		
$\bar{\Lambda} K_S^0$	10-30%	1.292 e-04	0.317 e-04	Yes	8.393 e-05	3.616 e-05	Yes		
	30-50%	9.851 e-04	0.776 e-04	Yes	2.054 e-04	0.875 e-04	Yes		

Table 26: $\Lambda(\bar{\Lambda})K_S^0$ Analyses: DCA to Primary Vertex of π^+ Daughter of K_S^0

DCA to Primary Vertex of π^+ Daughter of K_S^0

	I	·		5							
Pair Type	Centrality		Fit Results								
Tan Type	Centrality	A	В	C	Sig						
			2 vs 3 mm		•						
	0-10%	$6.388 \pm 26.374 \text{ e-03}$	$2.216 \pm 9.507 \text{ e-}02$	$-6.395 \pm 26.372 \text{ e-03}$	No						
$\Lambda { m K}_S^0$	10-30%	$4.661 \pm 21.838 \text{ e-}02$	$5.561 \pm 28.026 \mathrm{e}\text{-}03$	$-4.656 \pm 21.837 \text{ e-}02$	No						
3	30-50%	$1.780 \pm 2.167 \text{ e-03}$	$6.463 \pm 8.075 \text{ e} + 00$	$3.169 \pm 15.349 \text{ e-05}$	No						
	0-10%	$4.010 \pm 4.972 \text{ e-}04$	$7.441 \pm 8.555 \text{ e} + 00$	$-2.908 \pm 2.597 \text{ e-05}$	No						
$\bar{\Lambda} { m K}_{S}^{0}$	10-30%	$2.010 \pm 2.337 \text{ e-04}$	$3.137 \pm 4.413 \text{ e} + 00$	$-1.667 \pm 0.743 \text{ e-04}$	No						
2	30-50%	$5.327 \pm 14.932 \text{ e-}02$	$1.795 \pm 5.209 \text{ e-}02$	$-5.366 \pm 14.931 \text{ e-}02$	No						
			3 vs 4 mm								
	0-10%	$4.199 \pm 6.327 \text{ e-}02$	$-7.161 \pm 11.281 \text{ e-03}$	$-4.196 \pm 6.326 \mathrm{e}\text{-}02$	No						
$\Lambda {\sf K}_S^0$	10-30%	2.701 ± 9.611 e-02	$9.285 \pm 35.307 \text{ e-03}$	$-2.694 \pm 9.611 \text{ e-}02$	No						
	30-50%	$9.225 \pm 5.533 \text{ e-}02$	$9.191 \pm 2.868 \text{ e+01}$	$2.243 \pm 0.853 \text{ e-04}$	No						
	0-10%	$1.898 \pm 8.318 \text{ e-}02$	$9.205 \pm 45.418 \text{ e-03}$	$-1.884 \pm 8.318 \text{ e-}02$	No						
$ar{\Lambda} ext{K}_S^0$	10-30%	$2.234 \pm 10.938 \text{ e-}02$	$1.047 \pm 5.523 \text{ e-}02$	$-2.228 \pm 10.938 \text{ e-}02$	No						
2	30-50%	0.000 ± 0.000 e-00	0.000 ± 0.000 e+00	0.000 ± 0.000 e-00	No						

Table 27: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA to Primary Vertex of π^+ Daughter of K^0_S

DCA to Primary Vertex of π^- Daughter of K_S^0

		Fit Amplitudes							
Pair Type	Centrality	Amplitude	mplitude Error Sig Amplitude		Amplitude	Error	Sig		
		2 vs 3 mm			3 vs 4 mm				
	0-10%	2.544 e-02	10.117 e-02	No	3.537 e-04	3.539 e-04	No		
ΛK_S^0	10-30%	3.565 e-04	1.986 e-04	No	1.305 e-03	2.713 e-03	No		
	30-50%	4.448 e-20	2.572 e-02	No	1.089 e-01	3.232 e-01	No		
	0-10%	7.581 e-04	4.856 e-04	No	9.319 e-02	25.359 e-02	No		
$\bar{\Lambda} \mathrm{K}_S^0$	10-30%	2.354 e-02	9.667 e-02	No	6.463 e-04	2.477 e-04	Yes		
	30-50%	1.611 e-01	5.981 e-01	No	6.695 e-02	26.499 e-02	No		

Table 28: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA to Primary Vertex of π^- Daughter of K^0_S

DCA to Primary Vertex of π^- Daughter of K_S^0 SimpleExp

		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		2 vs 3 mm			3 vs 4 mm				
	0-10%	3.295 e-04	4.180 e-04	No	1.465 e-04	0.810 e-04	No		
ΛK_S^0	10-30%	1.043 e-04	0.317 e-04	Yes	1.487 e-04	0.361 e-04	Yes		
	30-50%	4.433 e-02	2.571 e-02	No	7.637 e-04	8.309 e-04	No		
	0-10%	1.107 e-04	0.423 e-04	Yes	9.278 e-02	10.901 e-02	No		
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	3.453 e-04	2.179 e-04	No	1.411 e-03	1.914 e-03	No		
	30-50%	3.505 e-04	3.077 e-04	No	3.244 e-04	0.886 e-04	Yes		

Table 29: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA to Primary Vertex of π^- Daughter of K^0_S

DCA to Primary Vertex of π^- Daughter of K_S^0

			Eit Doculto	5	
Pair Type	Centrality		Fit Results		
Tan Type	Centrality	A	В	C	Sig
2 vs 3 mm					
	0-10%	$2.544 \pm 10.117 \text{ e-}02$	$3.005 \pm 13.593 \text{ e-03}$	$-2.540 \pm 10.120 \text{ e-}02$	No
ΛK_S^0	10-30%	$3.565 \pm 1.986 \text{ e-04}$	$1.930 \pm 3.657 \text{ e} + 00$	$-2.229 \pm 2.464 \text{ e-}04$	No
	30-50%	$4.448 \pm 2.572 \text{ e-}02$	$7.673 \pm 2.926 \text{ e+01}$	$2.795 \pm 7.536 \text{ e-05}$	No
	0-10%	$7.581 \pm 4.856 \text{ e-04}$	1.301 ± 0.468 e+01	9.100 ± 1.624 e-05	No
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	$2.354 \pm 9.667 \text{ e-}02$	$1.258 \pm 5.638 \text{ e-}02$	$-2.328 \pm 9.667 \text{ e-}02$	No
	30-50%	1.611 ± 5.981 e-01	$3.999 \pm 16.115 \text{ e-03}$	$-1.606 \pm 5.981 \text{ e-01}$	No
			3 vs 4 mm		
	0-10%	$3.537 \pm 3.539 \text{ e-04}$	$7.848 \pm 5.711 \text{ e+00}$	$6.877 \pm 2.109 \text{ e-05}$	No
ΛK_S^0	10-30%	$1.305 \pm 2.713 \text{ e-03}$	$5.907 \pm 18.241 \text{ e-}01$	$-1.056 \pm 2.871 \text{ e-03}$	No
	30-50%	$1.089 \pm 3.232 \text{ e-}01$	$9.813 \pm 30.797 \text{ e-03}$	$-1.082 \pm 3.232 \text{ e-01}$	No
	0-10%	$9.319 \pm 25.259 \text{ e-}02$	$-4.433 \pm 10.843 \text{ e}+02$	$1.297 \pm 1.728 \text{ e-05}$	No
$ar{\Lambda} {\mathsf K}^0_S$	10-30%	$6.463 \pm 2.477 \text{ e-}04$	$1.841 \pm 3.027 \text{ e} + 00$	$-3.134 \pm 3.952 \text{ e-04}$	Yes
	30-50%	$6.695 \pm 26.499 \text{ e-}02$	$1.025 \pm 4.228 \text{ e-}02$	$-6.684 \pm 26.497 \text{ e-}02$	No

Table 30: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: DCA to Primary Vertex of π^- Daughter of K^0_S

Avgerage Separation of Like-Charge Daughters

			11.801480 8	opuration of I	Tike-Charge Dat	8					
				Fit Amplitude							
Pair Type	Pair Type Daughters		Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
				5.0	0 vs 6.0 cm		6.0	vs 7.0 cm			
			0-10%	1.411 e-05	0.047 e-05	Yes	2.585 e-06	8.713 e-06	No		
ΛK_S^0	p(A)	$\pi^+(\mathrm{K}^0_S)$	10-30%	7.573 e-04	1.805 e-04	Yes	1.845 e-05	1.834 e-05	No		
			30-50%	4.158 e-04	0.571 e-04	Yes	7.731 e-04	1.416 e-04	Yes		
			0-10%	1.353 e-05	0.612 e-05	Yes	5.059 e-06	1.011 e-06	Yes		
ΛK_S^0	$\pi^-(\Lambda)$	$\pi^-(\mathrm{K}^0_S)$	10-30%	2.665 e-06	8.444 e-06	No	1.157 e-05	1.549 e-05	No		
		5	30-50%	4.096 e-04	0.752 e-04	Yes	9.083 e-04	0.458 e-04	Yes		
			0-10%	2.020 e-05	0.599 e-05	Yes	1.200 e-06	3.157 e-06	No		
$\bar{\Lambda} K_S^0$	$\pi^+(ar{\Lambda})$	$\pi^{+}(K_{S}^{0})$	10-30%	7.702 e-04	7.002 e-04	No	2.172 e-04	1.205 e-04	No		
			30-50%	9.212 e-07	424.744 e-07	No	6.443 e-04	0.831 e-04	Yes		
			0-10%	7.048 e-05	0.670 e-05	Yes	1.671 e-05	0.488 e-05	Yes		
$ar{\Lambda} ext{K}_S^0$	$\bar{p}^-(\bar{\Lambda})$	$\pi^-(K_S^0)$	10-30%	2.769 e-05	0.053 e-05	Yes	1.010 e-03	0.367 e-03	Yes		
			30-50%	1.414 e-03	0.113 e-04	Yes	2.984 e-05	5.983 e-05	No		

Table 31: $\Lambda(\bar{\Lambda})K^0_S$ Analyses: Avgerage Separation of Positive Daughters

Avgerage Separation of Like-Charge Daughters SimpleExp

			_	Fit Amplitude					
Pair Type	Dau	ghters	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
				5.0	vs 6.0 cm		6.0	vs 7.0 cm	
			0-10%	1.470 e-05	0.077 e-05	Yes	1.106 e-05	0.028 e-05	Yes
$\Lambda { m K}_S^0$	$p(\Lambda)$	$\pi^+(\mathbf{K}^0_S)$	10-30%	3.301 e-05	1.005 e-05	Yes	1.738 e-05	0.121 e-05	Yes
			30-50%	5.385 e-04	0.839 e-04	Yes	3.867 e-04	0.997 e-04	Yes
			0-10%	0.000 e-00	0.000 e-00	No	0.000 e-00	0.000 e-00	No
$\Lambda { m K}_S^0$	$\pi^-(\Lambda)$	$\pi^-(\mathrm{K}^0_S)$	10-30%	0.000 e-00	0.000 e-00	No	0.000 e-00	0.000 e-00	No
~		~	30-50%	0.000 e-00	0.000 e-00	No	0.000 e-00	0.000 e-00	No
			0-10%	0.000 e-00	0.000 e-00	No	0.000 e-00	0.000 e-00	No
$ar{\Lambda} ext{K}_S^0$	$\pi^+(ar{\Lambda})$	$\pi^+(\mathrm{K}^0_S)$	10-30%	0.000 e-00	0.000 e-00	No	0.000 e-00	0.000 e-00	No
2			30-50%	0.000 e-00	0.000 e-00	No	0.000 e-00	0.000 e-00	No
			0-10%	2.079 e-04	0.163 e-04	Yes	1.040 e-05	0.638 e-05	No
$ar{\Lambda} ext{K}_S^0$	$ar{p}^-(ar{\Lambda})$	$\pi^-(K_S^0)$	10-30%	4.176 e-05	0.070 e-05	Yes	7.918 e-05	2.449 e-05	Yes
~			30-50%	1.225 e-03	0.092 e-03	Yes	2.495 e-05	0.380 e-05	Yes
	Tal	ble 32: $\Lambda(\bar{\Lambda})$	K_S^0 Analyses:	Avgerage Sepa	aration of Posit	ive Dau	ghters		