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

	<u> </u>						
	Fit Amplitudes						
Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
	4 vs 5 mm			5 vs 6 mm			
0-10%	2.709e-04	1.940e-04	No	-8.225e-03	5.836e-03	Yes	
10-30%	-6.759e-04	5.899e-04	No	-4.508e-03	3.159e-02	No	
30-50%	-9.913e-02	4.282e-01	No	-1.884e-01	7.004e-02	Yes	
0-10%	2.846e-04	4.418e-04	Yes	8.108e-05	1.071e-04	No	
10-30%	-3.324e-04	1.447e-03	No	-1.329e-02	4.550e-02	No	
30-50%	-2.783e-03	2.179e-03	Yes	-1.510e-02	3.137e-02	No	
	0-10% 10-30% 30-50% 0-10% 10-30%	0-10% 2.709e-04 10-30% -6.759e-04 30-50% -9.913e-02 0-10% 2.846e-04 10-30% -3.324e-04	Centrality         Amplitude         Error           4 vs 5 mm         4 vs 5 mm           0-10%         2.709e-04         1.940e-04           10-30%         -6.759e-04         5.899e-04           30-50%         -9.913e-02         4.282e-01           0-10%         2.846e-04         4.418e-04           10-30%         -3.324e-04         1.447e-03	Centrality         Amplitude         Error         Sig           4 vs 5 mm           0-10%         2.709e-04         1.940e-04         No           10-30%         -6.759e-04         5.899e-04         No           30-50%         -9.913e-02         4.282e-01         No           0-10%         2.846e-04         4.418e-04         Yes           10-30%         -3.324e-04         1.447e-03         No	Centrality         Amplitude         Error         Sig         Amplitude           4 vs 5 mm         5 mm         5 mm           0-10%         2.709e-04         1.940e-04         No         -8.225e-03           10-30%         -6.759e-04         5.899e-04         No         -4.508e-03           30-50%         -9.913e-02         4.282e-01         No         -1.884e-01           0-10%         2.846e-04         4.418e-04         Yes         8.108e-05           10-30%         -3.324e-04         1.447e-03         No         -1.329e-02	Centrality         Amplitude         Error         Sig         Amplitude         Error           4 vs 5 mm         5 vs 6 mm           0-10%         2.709e-04         1.940e-04         No         -8.225e-03         5.836e-03           10-30%         -6.759e-04         5.899e-04         No         -4.508e-03         3.159e-02           30-50%         -9.913e-02         4.282e-01         No         -1.884e-01         7.004e-02           0-10%         2.846e-04         4.418e-04         Yes         8.108e-05         1.071e-04           10-30%         -3.324e-04         1.447e-03         No         -1.329e-02         4.550e-02	

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

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

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

### DCA $\Lambda(\bar{\Lambda})$ 500MeVMaxFit

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		4 vs 5 mm			5 vs 6 mm			
	0-10%	8.210e-04	4.776e-03	No	-7.614e-03	5.701e-03	No	
$\Lambda K_S^0$	10-30%	-8.845e-04	6.547e-04	No	-4.438e-03	4.700e-03	No	
	30-50%	-5.078e-02	3.550e-02	No	-1.888e-01	7.061e-02	Yes	
	0-10%	3.951e-04	3.069e-04	No	-3.571e-02	2.149e-02	No	
$\bar{\Lambda} K_S^0$	10-30%	3.360e-04	1.552e-03	No	-3.442e-04	4.840e-04	No	
	30-50%	-1.989e-02	2.590e-02	No	-8.031e-03	8.382e-03	No	

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

#### 1 Systematic Errors

This study is currently ongoing. See Table 1.

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

Talk about stuff

# DCA $\Lambda(\bar{\Lambda})$ 500MeVMaxFit SimpleExp

- ( )									
		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		4 vs 5 mm			5 vs 6 mm				
	0-10%	2.616e-04	2.840e-04	No	-5.282e-03	4.887e-03	No		
$\Lambda K_S^0$	10-30%	-1.236e-03	1.568e-03	No	6.110e-05	1.457e-04	No		
	30-50%	-4.664e-02	3.295e-02	No	-1.877e-01	7.037e-02	Yes		
	0-10%	-6.093e-05	3.827e-05	No	-9.599e-02	1.133e-01	No		
$ar{\Lambda}  ext{K}_S^0$	10-30%	-3.478e-05	1.983e-04	No	-2.846e-04	6.743e-04	No		
	30-50%	-2.054e-02	2.609e-02	No	-3.701e-03	3.136e-03	No		

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

### DCA $K_S^0$

5									
		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		2 vs 3 mm			3 vs 4 mm				
	0-10%	-5.098e-04	7.595e-03	No	1.734e-04	2.179e-04	No		
$\Lambda K_S^0$	10-30%	-4.222e-03	5.512e-04	Yes	-2.562e-03	2.121e-03	Yes		
	30-50%	-8.888e-03	4.572e-03	No	-1.701e-02	6.118e-03	Yes		
	0-10%	-6.442e-04	1.336e-04	Yes	-5.795e-03	2.421e-02	No		
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	-6.376e-04	2.764e-04	Yes	-2.128e-03	4.345e-04	Yes		
	30-50%	-2.418e-03	9.059e-04	Yes	-1.175e-01	5.116e-01	No		

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

# DCA K<sub>S</sub> SimpleExp

		Fit Amplitudes						
Pair Type   Centra	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	
$\Lambda K_S^0$	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 6:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses: DCA  $K^0_S$  caption

### DCA K<sub>S</sub><sup>0</sup> 500MeVMaxFit

<u></u>									
		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		2 vs 3 mm			3 vs 4 mm				
	0-10%	-1.033e-04	5.689e-04	No	4.601e-02	1.295e-01	No		
$\Lambda K_S^0$	10-30%	-3.256e-02	4.003e-01	No	-2.569e-03	2.134e-03	No		
	30-50%	-9.087e-03	4.729e-03	No	-1.725e-02	6.276e-03	Yes		
	0-10%	-5.587e-02	2.478e-01	No	-3.939e-04	8.073e-04	No		
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	-4.325e-04	7.423e-04	No	-2.972e-02	1.304e-01	No		
	30-50%	-3.118e-01	9.701e-01	No	-4.751e-04	1.773e-03	No		

**Table 7:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA  $K_S^0$  caption

#### DCA K<sub>S</sub><sup>0</sup> 500MeVMaxFit SimpleExp

	Der ing soonie vinam it simpledap									
			Fit Amplitudes							
	Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
			2 vs 3 mm			3 vs 4 mm				
		0-10%	-1.149e-04	1.616e-04	No	1.495e-04	3.020e-04	No		
	$\Lambda { m K}_S^0$	10-30%	2.336e-04	7.234e-05	Yes	-2.560e-03	2.270e-03	No		
		30-50%	-7.966e-03	4.151e-03	No	-1.721e-02	6.245e-03	Yes		
		0-10%	6.657e-05	5.808e-04	No	7.037e-05	2.753e-05	Yes		
	$ar{\Lambda}  ext{K}_S^0$	10-30%	-4.373e-04	3.529e-04	No	-4.653e-04	3.627e-04	No		
		30-50%	-2.048e-03	1.296e-03	No	-2.871e-04	8.150e-04	No		

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

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

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		3 vs 4 mm			4 vs 5 mm			
	0-10%	-2.521e-04	2.924e-04	No	1.855e-04	2.245e-04	No	
$\Lambda K_S^0$	10-30%	-2.065e-02	2.251e-01	No	-2.885e-04	2.460e-04	No	
	30-50%	-9.063e-02	8.577e-02	Yes	8.807e-02	2.246e-01	No	
	0-10%	1.291e-04	3.440e-04	No	1.180e-05	1.241e-04	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	-9.701e-03	9.174e-03	Yes	-4.654e-02	3.200e-01	No	
	30-50%	-1.187e-02	1.435e-02	No	-1.513e-01	1.729e-01	Yes	

**Table 9:**  $\Lambda(\bar{\Lambda})K^0_S$  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	
$\Lambda K_S^0$	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	
$\bar{\Lambda} \mathrm{K}^0_S$	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 10:  $\Lambda(\bar{\Lambda})K^0_{\it S}$  Analyses: DCA  $\Lambda(\bar{\Lambda})$  Daughters

#### DCA $\Lambda(\bar{\Lambda})$ Daughters 500MeVMaxFit

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		3 vs 4 mm			4 vs 5 mm			
	0-10%	-2.026e-04	6.614e-04	No	2.292e-02	8.029e-02	No	
$\Lambda K_S^0$	10-30%	5.864e-05	7.232e-04	No	1.148e-03	1.704e-03	No	
	30-50%	-8.853e-02	9.281e-02	No	-4.432e-02	3.643e-02	No	
	0-10%	6.097e-05	2.955e-04	No	-1.036e-02	1.335e-02	No	
$ar{\Lambda} {\mathsf K}^0_S$	10-30%	-9.871e-03	9.501e-03	No	-1.316e-03	2.197e-03	Yes	
~	30-50%	-2.936e-04	1.749e-03	No	-1.496e-01	1.755e-01	No	

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

#### DCA $\Lambda(\bar{\Lambda})$ Daughters 500MeVMaxFit SimpleExp

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		3 vs 4 mm			4 vs 5 mm			
	0-10%	1.743e-05	3.776e-05	No	1.972e-04	2.813e-04	No	
$\Lambda K_S^0$	10-30%	1.293e-04	7.761e-05	No	-8.925e-05	6.165e-05	No	
	30-50%	-8.647e-02	9.120e-02	No	-5.097e-02	5.611e-02	No	
	0-10%	-8.539e-06	3.914e-05	No	5.936e-05	3.128e-05	No	
$ar{\Lambda}  ext{K}_S^0$	10-30%	1.001e-04	7.999e-05	No	-2.452e-04	2.952e-04	No	
	30-50%	4.672e-05	1.859e-04	No	-1.423e-01	1.753e-01	No	

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

# DCA K<sub>S</sub><sup>0</sup> Daughters

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		2 vs 3 mm			3 vs 4 mm			
	0-10%	-1.776e-03	1.570e-03	No	-2.483e-03	2.563e-03	No	
$\Lambda K_S^0$	10-30%	-1.195e-01	6.027e-02	Yes	-1.214e-03	1.265e-03	No	
	30-50%	-1.394e-01	5.485e-02	Yes	-1.196e-03	1.962e-03	No	
	0-10%	-2.234e-03	1.729e-03	Yes	-2.695e-03	5.304e+02	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	-5.343e-04	5.054e-04	Yes	-1.431e-02	1.046e-01	No	
	30-50%	-2.720e-02	1.860e-02	No	-3.800e-03	2.364e-03	Yes	

**Table 13:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA  $K_S^0$  Daughters

### DCA K<sub>S</sub><sup>0</sup> Daughters SimpleExp

		Fit Amplitudes						
J1	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	
$\Lambda K_S^0$	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	
$\bar{\Lambda} \mathrm{K}^0_S$	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 14:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses: DCA  $K^0_S$  Daughters

### DCA K<sub>S</sub><sup>0</sup> Daughters 500MeVMaxFit

38									
		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		2 vs 3 mm			3 vs 4 mm				
	0-10%	-2.224e-03	1.964e-03	No	-2.608e-03	2.700e-03	No		
$\Lambda K_S^0$	10-30%	-1.196e-01	6.076e-02	No	-1.712e-03	1.802e-03	No		
	30-50%	-1.399e-01	5.516e-02	Yes	-2.294e-03	3.122e-03	No		
	0-10%	-3.090e-03	2.209e-03	No	-5.637e-04	1.041e-03	No		
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	-1.205e-01	1.280e+00	No	-1.011e-03	3.690e-03	No		
	30-50%	-2.501e-02	1.913e-02	No	-1.227e-02	9.527e-03	No		

**Table 15:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses: DCA  $K^0_S$  Daughters

### DCA K<sub>S</sub><sup>0</sup> Daughters 500MeVMaxFit SimpleExp

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		2 vs 3 mm			3 v	vs 4 mm		
	0-10%	-1.383e-03	1.201e-03	No	-2.394e-03	2.528e-03	No	
$\Lambda K_S^0$	10-30%	-1.199e-01	6.112e-02	No	-1.673e-03	1.620e-03	No	
	30-50%	-1.397e-01	5.508e-02	Yes	-2.249e-03	3.303e-03	No	
	0-10%	-3.646e-03	2.561e-03	No	-4.246e-04	5.171e-04	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	1.800e-04	8.734e-05	Yes	-7.128e-04	9.398e-04	No	
	30-50%	-2.813e-02	1.883e-02	No	-1.285e-02	9.463e-03	No	

**Table 16:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA  $K_S^0$  Daughters

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

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.999	2 vs 0.9993		0.999	3 vs 0.9994		
	0-10%	4.736e-03	2.311e-03	Yes	1.700e-02	7.601e-02	No	
$\Lambda K_S^0$	10-30%	5.172e-03	2.253e-03	Yes	1.154e-04	1.586e+02	No	
	30-50%	3.862e-03	1.806e-03	Yes	5.883e-03	1.638e-03	Yes	
	0-10%	1.141e-03	1.203e-03	Yes	-3.554e-03	1.875e-02	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	3.518e-04	3.120e-04	No	-9.358e-03	6.628e-02	No	
	30-50%	2.669e-03	1.312e-03	Yes	-4.334e-04	9.528e-03	No	

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

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

		Fit Amplitudes							
Pair Type   Central	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		
$\Lambda K_S^0$	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		
$\bar{\Lambda} K_S^0$	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 18:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses:  $\Lambda(\bar{\Lambda})$  Cosine of Pointing Angle

#### $\Lambda(\bar{\Lambda})$ Cosine of Pointing Angle 500MeVMaxFit

( )								
		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.999	2 vs 0.9993		0.999	3 vs 0.9994	•	
	0-10%	4.739e-03	2.319e-03	Yes	-1.139e-02	4.924e-02	No	
$\Lambda K_S^0$	10-30%	5.190e-03	2.265e-03	Yes	1.970e-02	1.534e-02	No	
	30-50%	3.717e-03	1.848e-03	Yes	5.557e-03	1.618e-03	Yes	
	0-10%	1.146e-03	1.219e-03	No	-1.535e-02	9.010e-02	No	
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	3.266e-02	1.168e-01	No	1.117e-02	6.354e-02	No	
	30-50%	2.072e-03	1.019e-03	Yes	-9.320e-02	5.512e-01	No	

**Table 19:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses:  $\Lambda(\bar{\Lambda})$  Cosine of Pointing Angle

#### $\Lambda(\bar{\Lambda})$ Cosine of Pointing Angle 500MeVMaxFit SimpleExp

		Fit Amplitudes						
Pair Type   Centra	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.9992 vs 0.9993			0.9993 vs 0.9994			
	0-10%	4.733e-03	2.311e-03	Yes	-7.459e-05	1.768e-04	No	
$\Lambda K_S^0$	10-30%	5.201e-03	2.270e-03	Yes	-2.253e-05	7.593e-05	No	
	30-50%	-6.078e-05	6.309e-05	No	5.494e-03	1.496e-03	Yes	
	0-10%	-2.031e-05	8.438e-07	Yes	-4.978e-05	6.433e-05	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	3.929e-04	2.778e-04	No	1.333e-04	2.362e-04	No	
	30-50%	1.770e-03	6.120e-04	Yes	1.169e-04	7.436e-05	No	

**Table 20:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses:  $\Lambda(\bar{\Lambda})$  Cosine of Pointing Angle

#### $K_S^0$ Cosine of Pointing Angle

		5						
		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.9992 vs 0.9993			0.9993 vs 0.9994			
	0-10%	-3.192e-04	4.037e-04	No	7.957e-04	5.050e-04	Yes	
$\Lambda K_S^0$	10-30%	-2.184e-02	1.354e-01	No	-5.937e-03	4.484e-02	No	
	30-50%	-3.489e-04	3.645e-04	No	-1.182e-01	2.429e-01	No	
	0-10%	5.974e-04	4.142e-04	No	6.145e-04	4.107e-04	Yes	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	4.988e-03	2.080e-03	Yes	1.610e-03	1.412e-03	Yes	
	30-50%	-5.806e-02	1.270e-01	No	-9.421e-04	4.946e-04	No	

**Table 21:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses:  $K^0_S$  Cosine of Pointing Angle

### ${\rm K}^0_{\rm S}$ Cosine of Pointing Angle SimpleExp

			Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		0.999	2 vs 0.9993		0.999	3 vs 0.9994			
	0-10%	3.209 e-04	4.053 e-04	No	2.184 e-04	2.188 e-04	No		
$\Lambda K_S^0$	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 22:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses:  $K^0_S$  Cosine of Pointing Angle

#### K<sub>s</sub><sup>0</sup> Cosine of Pointing Angle 500MeVMaxFit

3 & & &								
		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.999	2 vs 0.9993		0.999	3 vs 0.9994		
	0-10%	-2.748e-04	2.327e-04	No	5.633e-04	1.743e-04	Yes	
$\Lambda K_S^0$	10-30%	1.283e-03	1.818e-03	No	8.058e-03	3.959e-03	Yes	
	30-50%	1.622e-04	1.393e-03	No	5.106e-03	2.875e-03	No	
	0-10%	4.427e-04	3.762e-04	No	6.478e-04	6.512e-04	No	
$\bar{\Lambda} K_S^0$	10-30%	4.230e-03	1.702e-03	Yes	1.217e-03	1.138e-03	No	
	30-50%	7.326e-03	4.745e-03	Yes	5.373e-04	1.605e-03	No	

**Table 23:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses:  $K^0_S$  Cosine of Pointing Angle

### K<sub>S</sub><sup>0</sup> Cosine of Pointing Angle 500MeVMaxFit SimpleExp

	-	Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.999	2 vs 0.9993		0.999	3 vs 0.9994		
	0-10%	-3.282e-04	4.102e-04	No	7.088e-04	3.667e-04	No	
$\Lambda K_S^0$	10-30%	1.476e-03	2.082e-03	No	8.069e-03	3.961e-03	Yes	
	30-50%	-3.150e-04	6.895e-04	No	5.057e-03	2.639e-03	No	
	0-10%	5.986e-04	4.487e-04	No	7.197e-04	7.865e-04	No	
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	3.562e-03	1.378e-03	Yes	1.303e-03	1.067e-03	No	
	30-50%	5.878e-02	8.703e-02	No	1.493e-04	1.017e-04	No	

**Table 24:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses:  $K^0_S$  Cosine of Pointing Angle

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

			1 1		` '				
			Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		0.5	vs 1 mm		1 ,	vs 2 mm			
	0-10%	0.000e+00	0.000e+00	No	-1.197e-03	9.873e-04	Yes		
$\Lambda K_S^0$	10-30%	1.567e-07	1.894e-06	No	-8.125e-04	1.282e-03	Yes		
3	30-50%	0.000e+00	0.000e+00	No	5.361e-03	6.412e-03	Yes		
	0-10%	0.000e+00	0.000e+00	No	-2.369e-04	4.189e-04	No		
$\bar{\Lambda} K_S^0$	10-30%	0.000e+00	0.000e+00	No	6.808e-02	5.327e-01	No		
	30-50%	0.000e+00	0.000e+00	No	-5.296e-03	2.603e-03	Yes		

**Table 25:**  $\Lambda(\bar{\Lambda})K_S^0$  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

		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	
$\Lambda K_S^0$	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	
$ar{\Lambda} {\sf K}^0_S$	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 26:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $p^+(\bar{p}^-)$  Daughter of  $\Lambda(\bar{\Lambda})$ 

#### DCA to Primary Vertex of $p^+(\bar{p}^-)$ Daughter of $\Lambda(\bar{\Lambda})$ 500MeVMaxFit

		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		0.5	vs 1 mm		1 vs 2 mm				
	0-10%	0.000e+00	0.000e+00	No	-1.795e-03	1.945e-03	No		
$\Lambda K_S^0$	10-30%	3.865e-06	2.831e-06	No	-6.617e-02	3.318e-01	No		
	30-50%	0.000e+00	0.000e+00	No	5.453e-03	6.819e-03	No		
	0-10%	0.000e+00	0.000e+00	No	-8.382e-02	3.424e-01	No		
$\bar{\Lambda} \mathrm{K}_S^0$	10-30%	0.000e+00	0.000e+00	No	7.522e-02	4.435e-01	No		
	30-50%	0.000e+00	0.000e+00	No	9.370e-02	8.096e-02	No		

**Table 27:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $p^+(\bar{p}^-)$  Daughter of  $\Lambda(\bar{\Lambda})$ 

#### DCA to Primary Vertex of $p^+(\bar{p}^-)$ Daughter of $\Lambda(\bar{\Lambda})$ 500MeVMaxFit SimpleExp

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.5 vs 1 mm			1 vs 2 mm			
	0-10%	0.000e+00	0.000e+00	No	-2.602e-03	2.525e-03	No	
$\Lambda K_S^0$	10-30%	2.964e-07	1.165e-06	No	1.702e-04	9.110e-05	No	
	30-50%	0.000e+00	0.000e+00	No	5.775e-03	7.524e-03	No	
	0-10%	0.000e+00	0.000e+00	No	-2.584e-04	4.464e-04	No	
$ar{\Lambda}  ext{K}_S^0$	10-30%	0.000e+00	0.000e+00	No	-3.469e-04	1.403e-04	Yes	
	30-50%	0.000e+00	0.000e+00	No	-6.689e-04	1.232e-03	No	

**Table 28:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $p^+(\bar{p}^-)$  Daughter of  $\Lambda(\bar{\Lambda})$ 

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

		Fit Amplitudes						
	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		2 vs 3 mm			3 vs 4 mm			
	0-10%	-8.432e-04	9.717e-04	Yes	-7.591e-05	1.155e-04	No	
$\Lambda K_S^0$	10-30%	-1.287e-04	1.797e-04	No	-3.352e-04	3.326e-04	No	
	30-50%	1.345e-02	9.502e-03	Yes	6.001e-03	4.808e-03	No	
	0-10%	-1.051e-04	9.449e-05	Yes	-7.565e-05	9.354e-05	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	2.201e-02	1.242e-02	Yes	-2.012e-04	1.922e-03	No	
	30-50%	-1.652e-02	2.324e-01	No	-1.348e-01	8.053e-01	No	

**Table 29:**  $\Lambda(\bar{\Lambda})K_S^0$  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		
$\Lambda K_S^0$	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		
$\bar{\Lambda} \mathrm{K}^0_S$	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 30:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^-(\pi^+)$  Daughter of  $\Lambda(\bar{\Lambda})$ 

#### DCA to Primary Vertex of $\pi^-(\pi^+)$ Daughter of $\Lambda(\bar{\Lambda})$ 500MeVMaxFit

		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		2 .	vs 3 mm		3 vs 4 mm				
	0-10%	-6.500e-03	9.251e-02	No	-8.742e-04	2.949e-04	Yes		
$\Lambda K_S^0$	10-30%	-3.754e-05	6.477e-04	No	1.724e-02	1.047e-01	No		
	30-50%	1.467e-02	1.035e-02	Yes	5.984e-03	4.845e-03	No		
	0-10%	-2.913e-02	1.043e-01	No	9.866e-04	3.005e-04	Yes		
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	2.197e-02	1.242e-02	No	3.265e-02	1.604e-01	No		
	30-50%	1.840e-03	2.010e-03	No	4.275e-02	1.307e-02	Yes		

**Table 31:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^-(\pi^+)$  Daughter of  $\Lambda(\bar{\Lambda})$ 

#### DCA to Primary Vertex of $\pi^-(\pi^+)$ Daughter of $\Lambda(\bar{\Lambda})$ 500MeVMaxFit SimpleExp

		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		2 .	vs 3 mm		3	vs 4 mm		
	0-10%	3.829e-05	1.846e-05	Yes	-4.781e-05	8.826e-05	No	
$\Lambda K_S^0$	10-30%	1.498e-03	2.398e-03	No	4.245e+00	4.457e+01	No	
	30-50%	3.751e-03	2.567e-03	No	6.001e-03	4.805e-03	No	
	0-10%	5.680e-05	1.816e-05	Yes	-3.516e-05	2.272e-05	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	1.539e-04	2.857e-04	No	-1.311e-04	4.871e-05	Yes	
	30-50%	1.410e-03	1.734e-03	No	4.401e-02	1.349e-02	Yes	

**Table 32:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^-(\pi^+)$  Daughter of  $\Lambda(\bar{\Lambda})$ 

#### DCA to Primary Vertex of $\pi^+$ 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%	6.388e-03	2.637e-02	No	4.199e-02	6.327e-02	No	
$\Lambda K_S^0$	10-30%	4.661e-02	2.184e-01	No	2.701e-02	9.611e-02	No	
	30-50%	1.780e-03	2.167e-03	No	9.225e-02	5.533e-02	Yes	
	0-10%	4.010e-04	4.972e-04	No	1.898e-02	8.318e-02	No	
$\bar{\Lambda} \mathrm{K}_{S}^{0}$	10-30%	2.010e-04	2.337e-04	Yes	2.234e-02	1.094e-01	No	
	30-50%	5.327e-02	1.493e-01	No	-3.745e-04	1.374e-03	No	

**Table 33:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^+$  Daughter of  $K_S^0$ 

### DCA to Primary Vertex of $\pi^+$ Daughter of $K^0_S$ SimpleExp

		1		- 1° . A	1. 1			
		Fit Amplitudes						
Pair Type	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	
$\Lambda K_S^0$	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	
$\bar{\Lambda} \mathrm{K}^0_S$	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 34:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^+$  Daughter of  $K_S^0$ 

#### DCA to Primary Vertex of $\pi^+$ Daughter of $K_s^0$ 500MeVMaxFit

		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		2 .	vs 3 mm		3 vs 4 mm				
	0-10%	-2.608e-02	4.971e-02	No	-7.864e-03	7.668e-03	Yes		
$\Lambda K_S^0$	10-30%	-8.553e-03	7.190e-03	No	-5.121e-04	6.840e-04	No		
	30-50%	2.406e-03	2.064e-03	No	6.805e-03	2.133e-03	Yes		
	0-10%	5.941e-04	1.172e-03	No	4.175e-04	4.092e-04	No		
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	4.652e-02	3.458e-01	No	-7.284e-03	1.660e-02	No		
	30-50%	2.016e-01	3.865e+00	No	-5.308e-05	2.336e-03	No		

**Table 35:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^+$  Daughter of  $K_S^0$ 

### DCA to Primary Vertex of $\pi^+$ Daughter of $K_S^0$ 500MeVMaxFit SimpleExp

		Fit Amplitudes						
	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		2 ,	vs 3 mm		3 vs 4 mm			
	0-10%	-4.519e-05	2.636e-05	No	-8.563e-05	3.040e-05	Yes	
$\Lambda K_S^0$	10-30%	-8.408e-03	7.107e-03	No	-4.274e-04	9.735e-04	No	
	30-50%	2.064e-03	1.619e-03	No	1.274e-03	1.270e-03	No	
	0-10%	8.474e-04	1.271e-03	No	3.787e-04	3.383e-04	No	
$ar{\Lambda}  ext{K}_S^0$	10-30%	-7.583e-05	5.660e-05	No	-7.112e-03	1.605e-02	No	
	30-50%	-6.532e-04	1.388e-04	Yes	3.770e-02	1.629e-02	Yes	

**Table 36:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^+$  Daughter of  $K_S^0$ 

### DCA to Primary Vertex of $\pi^-$ Daughter of $K_c^0$

	2 3									
		Fit Amplitudes								
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig			
		2 v	vs 3 mm		3	vs 4 mm				
	0-10%	2.544e-02	1.012e-01	No	3.537e-04	3.539e-04	Yes			
$\Lambda K_S^0$	10-30%	3.565e-04	1.986e-04	No	1.305e-03	2.713e-03	No			
	30-50%	4.448e-02	2.572e-02	No	1.089e-01	3.232e-01	No			
	0-10%	-7.581e-04	4.856e-04	Yes	9.319e-02	2.536e-01	No			
$\bar{\Lambda} K_S^0$	10-30%	2.354e-02	9.667e-02	No	6.463e-04	2.477e-04	Yes			
	30-50%	1.611e-01	5.981e-01	No	6.695e-02	2.650e-01	No			

**Table 37:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^-$  Daughter of  $K_S^0$ 

### DCA to Primary Vertex of $\pi^-$ Daughter of $K^0_{\mathcal{S}}$ SimpleExp

						•	
				Fit Am	plitudes		
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
$\Lambda K_S^0$	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
$\bar{\Lambda} \mathrm{K}^0_S$	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 38:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses: DCA to Primary Vertex of  $\pi^-$  Daughter of  $K^0_S$ 

#### DCA to Primary Vertex of $\pi^-$ Daughter of $K_s^0$ 500MeVMaxFit

		Fit Amplitudes								
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig			
		2 ,	vs 3 mm		3	vs 4 mm				
	0-10%	-3.737e-04	2.921e-04	No	3.329e-04	3.135e-04	No			
$\Lambda K_S^0$	10-30%	4.062e-04	7.856e-04	No	5.080e-02	3.015e-01	No			
	30-50%	4.471e-02	2.576e-02	No	-1.367e-01	1.684e+00	No			
	0-10%	-6.888e-04	4.034e-04	Yes	9.217e-02	1.088e-01	No			
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	-6.684e-02	6.573e-01	No	1.507e-03	2.286e-03	No			
	30-50%	-5.625e-03	7.924e-02	No	2.084e-05	1.285e-03	No			

**Table 39:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^-$  Daughter of  $K_S^0$ 

#### DCA to Primary Vertex of $\pi^-$ Daughter of $K_s^0$ 500MeVMaxFit SimpleExp

	Crr to rinnary	verten or n	Dauginer or	115 500	order v roland it i	эшриськр		
		Fit Amplitudes						
Pair Type	e Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		2	vs 3 mm		3 1	vs 4 mm		
	0-10%	-3.283e-04	4.184e-04	No	3.117e-04	2.151e-04	No	
$\Lambda K_S^0$	10-30%	-7.208e-07	3.153e-04	No	2.858e-04	6.697e-04	No	
	30-50%	4.434e-02	2.574e-02	No	2.761e-04	1.565e-04	No	
	0-10%	8.823e-05	2.701e-05	Yes	9.286e-02	1.113e-01	No	
$\bar{\Lambda} \mathrm{K}^0_S$	10-30%	1.778e-04	5.686e-05	Yes	1.343e-03	1.986e-03	No	
	30-50%	1.449e-04	1.368e-04	No	-1.887e-04	1.605e-04	No	

**Table 40:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: DCA to Primary Vertex of  $\pi^-$  Daughter of  $K_S^0$ 

Avgerage Separation of Like-Charge Daughters

						Fit Am	plitude		
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%	1.411e-05	4.698e-07	Yes	2.585e-06	8.713e-06	Yes
$\Lambda K_S^0$	$p(\Lambda)$	$\pi^+(\mathbf{K}^0_S)$	10-30%	7.573e-04	1.805e-04	Yes	-1.845e-05	1.834e-05	No
			30-50%	4.158e-04	5.709e-05	Yes	7.731e-04	1.416e-04	Yes
			0-10%	1.353e-05	6.116e-06	Yes	-5.059e-06	1.011e-06	Yes
$\Lambda K_S^0$	$\pi^-(\Lambda)$	$\pi^-(\mathrm{K}^0_S)$	10-30%	-2.665e-06	8.444e-06	No	-1.157e-05	1.549e-05	No
			30-50%	4.096e-04	7.522e-05	Yes	9.083e-04	4.578e-05	Yes
			0-10%	2.020e-05	5.991e-06	Yes	-1.200e-06	3.157e-06	No
$ar{\Lambda}  ext{K}_S^0$	$\pi^+(ar{\Lambda})$	$\pi^+(\mathbf{K}^0_S)$	10-30%	7.702e-04	7.002e-04	No	2.173e-04	1.205e-04	Yes
			30-50%	-9.212e-07	4.247e-05	No	6.443e-04	8.313e-05	Yes
			0-10%	7.047e-05	6.696e-06	Yes	1.671e-05	4.885e-06	Yes
$\bar{\Lambda} \mathrm{K}^0_S$	$ar{p}^-(ar{\Lambda})$	$\pi^-(\mathbf{K}^0_S)$	10-30%	2.769e-05	5.334e-07	Yes	1.010e-03	3.667e-04	Yes
			30-50%	1.414e-03	1.135e-04	Yes	-2.984e-05	5.983e-05	No

**Table 41:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: Avgerage Separation of Positive Daughters

#### Avgerage Separation of Like-Charge Daughters SimpleExp

			<del> </del>	I		<del></del>	1 1		
					-	Fit Am	plitude		
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
$\Lambda K_S^0$	$p(\Lambda)$	$\pi^+(\mathbf{K}^0_S)$	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%	8.576e-06	2.464e-06	Yes	-5.105e-06	1.707e-06	Yes
$\Lambda K_S^0$	$\pi^-(\Lambda)$	$\pi^-(\mathrm{K}^0_S)$	10-30%	-2.323e-06	5.401e-07	Yes	-1.058e-05	9.897e-07	Yes
			30-50%	4.015e-04	7.038e-05	Yes	1.007e-03	5.428e-05	Yes
			0-10%	1.237e-05	3.564e-06	Yes	-1.254e-06	1.998e-07	Yes
$\bar{\Lambda} \mathrm{K}^0_S$	$\pi^+(ar{\Lambda})$	$\pi^+(\mathbf{K}^0_S)$	10-30%	-5.246e-06	7.450e-07	Yes	2.042e-05	9.858e-06	Yes
			30-50%	4.154e-04	7.668e-05	Yes	5.449e-04	6.394e-05	Yes
			0-10%	2.079 e-04	0.163 e-04	Yes	1.040 e-05	0.638 e-05	No
$ar{\Lambda} {\sf K}_S^0$	$ar{p}^-(ar{\Lambda})$	$\pi^-(\mathbf{K}_S^0)$	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

**Table 42:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: Avgerage Separation of Positive Daughters

### 1.2 Systematic Errors: $\Lambda K^{\pm}$

#### Avgerage Separation of Like-Charge Daughters 500MeVMaxFit

						Fit Am	plitude		
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%	1.509e-05	3.300e-05	No	5.692e-04	3.758e-04	No
$\Lambda K_S^0$	p(A)	$\pi^{+}(K_{S}^{0})$	10-30%	1.981e-05	2.897e-05	No	5.948e-02	7.965e-05	Yes
			30-50%	6.630e-04	6.601e-04	No	7.122e-04	1.322e-04	Yes
			0-10%	5.113e-04	2.177e-04	Yes	-5.775e-05	3.737e-05	No
$\Lambda K_S^0$	$\pi^-(\Lambda)$	$\pi^-(\mathrm{K}^0_S)$	10-30%	5.405e-03	1.317e-02	No	7.111e-04	1.293e-04	Yes
			30-50%	4.522e-05	4.113e-05	No	7.746e-05	6.301e-06	Yes
			0-10%	8.959e-04	2.124e-04	Yes	-3.231e-06	3.802e-05	No
$\bar{\Lambda} \mathrm{K}^0_{\mathrm{S}}$	$\pi^+(ar{\Lambda})$	$\pi^{+}(K_{S}^{0})$	10-30%	8.833e-04	2.599e-04	Yes	1.588e-05	4.047e-05	No
		5	30-50%	2.309e-02	3.156e-02	No	6.364e-05	5.192e-05	No
			0-10%	1.677e-04	1.092e-04	No	-3.992e-05	3.184e-05	No
$ar{\Lambda}  ext{K}_S^0$	$\bar{p}^-(\bar{\Lambda})$	$\pi^-(K_S^0)$	10-30%	1.470e-05	3.656e-05	No	-2.323e-06	9.305e-05	No
			30-50%	7.334e-05	2.896e-05	Yes	5.538e-04	3.085e-04	No

**Table 43:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses: Avgerage Separation of Positive Daughters

#### Avgerage Separation of Like-Charge Daughters 500MeVMaxFit SimpleExp

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						Fit Am	plitude		
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%	1.665e-05	2.087e-06	Yes	2.653e-04	1.739e-04	No
$\Lambda K_S^0$	p(A)	$\pi^+(\mathrm{K}^0_S)$	10-30%	2.331e-05	4.563e-05	No	-1.713e-05	6.046e-06	Yes
		~	30-50%	4.333e-04	1.155e-04	Yes	7.198e-04	1.244e-04	Yes
			0-10%	7.361e-06	2.047e-06	Yes	-2.548e-05	2.467e-05	No
$\Lambda K_S^0$	$\pi^-(\Lambda)$	$\pi^-(\mathrm{K}^0_S)$	10-30%	4.421e-05	3.105e-05	No	7.315e-04	1.322e-04	Yes
		J	30-50%	6.366e-05	5.813e-05	No	1.154e-04	8.695e-06	Yes
			0-10%	8.888e-04	2.082e-04	Yes	-5.316e-06	3.826e-05	No
$\bar{\Lambda} K_S^0$	$\pi^+(ar{\Lambda})$	$\pi^{+}(K_{S}^{0})$	10-30%	9.162e-04	2.614e-04	Yes	1.925e-05	6.041e-05	No
		~	30-50%	1.478e-04	4.676e-05	Yes	9.973e-05	6.549e-05	No
			0-10%	1.730e-04	1.161e-04	No	-2.798e-05	4.725e-05	No
$\bar{\Lambda} \mathrm{K}^0_S$	$ar{p}^-(ar{\Lambda})$	$\pi^-(\mathrm{K}^0_S)$	10-30%	1.579e-05	5.734e-05	No	-3.884e-07	6.028e-06	No
			30-50%	1.074e-04	3.781e-05	Yes	4.932e-04	2.440e-04	Yes

**Table 44:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses: Avgerage Separation of Positive Daughters

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

			I	it Am	plitudes		
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		4 v	vs 5 mm		5 ,	vs 6 mm	
	0-10%	-6.666e-03	2.086e-02	No	-1.019e-02	6.227e-02	No
$\Lambda \mathrm{K}^+$	10-30%	-6.310e-03	2.986e-02	No	-2.460e-02	4.712e-02	No
	30-50%	-5.296e-02	6.016e-02	No	-7.354e-04	4.393e-04	No
	0-10%	-1.678e-04	8.219e-05	Yes	-2.776e-04	1.373e-04	Yes
$ar{\Lambda} \mathrm{K}^-$	10-30%	-7.670e-04	2.620e-04	Yes	-4.637e-03	3.803e-02	No
	30-50%	-2.464e-02	1.694e-01	No	-5.859e-04	5.850e-03	No
	0-10%	-3.957e-04	9.414e-04	No	-1.755e-04	1.311e-04	No
$\Lambda K^-$	10-30%	-8.918e-04	4.324e-04	Yes	-3.992e-04	2.014e-04	No
	30-50%	-1.631e-03	1.318e-03	Yes	-8.526e-04	7.790e-04	No
	0-10%	-1.581e-04	2.243e-04	No	-1.169e-02	1.167e-01	No
$ar{\Lambda} \mathrm{K}^+$	10-30%	-5.592e-04	2.294e-04	Yes	-1.115e-03	1.203e-03	No
	30-50%	-3.128e-03	2.911e-03	Yes	-5.595e-05	8.072e-04	Yes

**Table 45:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA  $\Lambda(\bar{\Lambda})$ 

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

				Fit Am	plitudes		
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		4	vs 5 mm		5	vs 6 mm	
	0-10%	1.859 e-04	1.047 e-04	No	7.312 e-05	0.911 e-05	Yes
$\Lambda \mathrm{K}^+$	10-30%	8.104 e-05	2.477 e-05	Yes	8.514 e-05	1.935 e-05	Yes
	30-50%	5.386 e-02	6.149 e-02	No	6.569 e-04	6.850 e-04	No
	0-10%	1.679 e-04	0.978 e-04	No	7.168 e-05	0.964 e-05	Yes
$ar{\Lambda} \mathrm{K}^-$	10-30%	9.280 e-04	4.156 e-04	Yes	2.773 e-05	2.045 e-05	No
	30-50%	2.969 e-04	0.615 e-04	Yes	7.119 e-05	4.811 e-05	No
	0-10%	4.973 e-05	1.210 e-05	Yes	3.881 e-05	0.941 e-05	Yes
$\Lambda K^-$	10-30%	1.648 e-04	0.256 e-04	Yes	4.941 e-40	2.904 e-04	No
	30-50%	5.229 e-04	3.738 e-04	No	8.450 e-04	11.134 e-04	No
	0-10%	1.792 e-04	2.976 e-04	No	3.290 e-05	3.245 e-05	No
$ar{\Lambda} \mathrm{K}^+$	10-30%	4.729 e-04	4.270 e-04	No	7.453 e-04	7.346 e-04	No
	30-50%	8.736 e-04	4.348 e-04	Yes	2.936 e-04	0.474 e-04	Yes

**Table 46:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA  $\Lambda(\bar{\Lambda})$ 

Talk about stuff

### DCA $\Lambda(\bar{\Lambda})$ 500MeVMaxFit

			I	Fit Am	plitudes		
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		4 1	vs 5 mm	<b>'</b>	5 '	vs 6 mm	
	0-10%	-2.986e-02	1.645e-01	No	2.006e-03	2.090e-03	Yes
$\Lambda K^+$	10-30%	-8.643e-03	1.603e-01	No	7.363e-04	1.788e-03	No
	30-50%	-5.216e-02	5.994e-02	No	-3.451e-02	2.743e-01	No
	0-10%	-3.432e-03	2.215e-02	No	-3.703e-02	2.614e-01	No
$\bar{\Lambda} \mathrm{K}^-$	10-30%	-9.909e-04	1.418e-03	No	-3.485e-02	1.963e-01	No
	30-50%	1.579e-03	1.199e-03	No	3.059e-04	1.149e-03	No
	0-10%	-1.968e-02	1.487e-01	No	2.004e-03	1.465e-03	No
$\Lambda K^-$	10-30%	-1.394e-03	1.794e-03	No	-4.588e-04	3.685e-04	No
	30-50%	-1.516e-03	1.011e-03	No	-8.272e-04	7.739e-04	No
	0-10%	-1.016e-02	5.231e-02	No	8.251e-04	1.290e-03	No
$ar{\Lambda} \mathrm{K}^+$	10-30%	-1.407e-02	5.320e-02	No	-7.610e-04	6.160e-04	No
	30-50%	-4.230e-03	4.236e-03	Yes	-2.218e-04	5.994e-04	No

**Table 47:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA  $\Lambda(\bar{\Lambda})$ 

#### DCA $\Lambda(\bar{\Lambda})$ 500MeVMaxFit SimpleExp

		DCH H(H) J	OOME VIVIUAL	. It SIII	ргевир		
			F	it Am	plitudes		
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		4 v	s 5 mm		5 ,	vs 6 mm	
	0-10%	-1.200e-04	8.688e-05	No	2.534e-04	1.983e-04	No
$\Lambda K^+$	10-30%	-3.714e-05	1.986e-04	No	6.806e-02	7.932e-02	No
	30-50%	-5.383e-02	6.237e-02	No	-3.545e-04	4.265e-04	No
	0-10%	-1.388e-04	1.057e-04	No	4.615e-05	1.693e-05	Yes
$ar{\Lambda} \mathrm{K}^-$	10-30%	-7.745e-04	4.039e-04	No	-3.957e-05	5.462e-04	No
	30-50%	1.601e-03	1.398e-03	No	2.435e-04	1.118e-03	No
	0-10%	-6.034e-05	1.158e-04	No	1.924e-03	1.398e-03	No
$\Lambda K^-$	10-30%	4.468e-05	4.450e-05	No	-4.520e-04	3.092e-04	No
	30-50%	-1.496e-03	9.168e-04	No	-7.476e-04	1.012e-03	No
	0-10%	-1.777e-04	2.999e-04	No	-2.152e-05	1.639e-05	No
$ar{\Lambda} \mathrm{K}^+$	10-30%	-3.655e-04	3.734e-04	No	-8.857e-04	7.247e-04	No
	30-50%	-1.650e-03	1.124e-03	No	-3.706e-04	3.366e-04	No

**Table 48:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA  $\Lambda(\bar{\Lambda})$ 

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

Dell'I(II) Daughters								
		Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		3 1	vs 4 mm		4 ,	vs 5 mm		
	0-10%	-1.077e-02	9.329e-03	Yes	-2.477e-03	1.215e-03	Yes	
$\Lambda \mathrm{K}^+$	10-30%	4.819e-02	3.967e-01	No	-3.668e-04	2.075e-03	No	
	30-50%	1.002e-03	1.848e-03	Yes	2.652e-02	2.201e-01	No	
	0-10%	3.447e-05	1.124e-04	No	-3.323e-03	1.714e-02	No	
$ar{\Lambda} \mathrm{K}^-$	10-30%	3.139e-02	1.527e-01	No	1.054e-03	1.199e-03	Yes	
	30-50%	-8.406e-04	1.337e-03	No	2.359e-03	2.918e-03	Yes	
	0-10%	-2.908e-03	1.380e-02	No	-5.250e-04	6.241e-04	No	
$\Lambda K^-$	10-30%	-2.643e-04	2.386e-04	No	-4.442e-04	2.721e-04	No	
	30-50%	-1.134e-02	7.345e-03	Yes	4.163e-02	1.631e-01	No	
	0-10%	-5.184e-05	1.830e-04	No	4.305e-05	8.483e-05	No	
$ar{\Lambda} \mathrm{K}^+$	10-30%	6.008e-02	2.167e-01	No	-3.188e-02	2.276e-02	No	
	30-50%	4.338e-04	6.151e-04	No	1.003e-02	1.077e-01	No	

**Table 49:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA  $\Lambda(\bar{\Lambda})$  Daughters

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

	DCA $\Lambda(\Lambda)$ Daughters SimpleExp									
			Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig			
		3	vs 4 mm		4	vs 5 mm				
	0-10%	2.617 e-05	1.188 e-05	Yes	2.349 e-03	1.137 e-03	Yes			
$\Lambda \mathrm{K}^+$	10-30%	5.998 e-05	2.475 e-05	Yes	1.743 e-05	5.739 e-05	No			
	30-50%	1.434 e-04	0.586 e-04	Yes	7.623 e-02	3.691 e-01	Yes			
	0-10%	7.637 e-05	1.267 e-05	Yes	4.164 e-04	5.566 e-04	No			
$ar{\Lambda} \mathrm{K}^-$	10-30%	6.623 e-04	9.620 e-04	No	8.930 e-05	6.244 e-05	No			
	30-50%	8.433 e-04	12.475 e-04	No	2.463 e-04	1.298 e-04	No			
	0-10%	1.475 e-04	1.052 e-04	No	5.810 e-04	6.690 e-04	No			
$\Lambda K^-$	10-30%	7.090 e-05	2.563 e-05	Yes	6.331 e-05	6.231 e-05	No			
	30-50%	3.588 e-04	2.293 e-04	No	1.727 e-04	0.480 e-04	Yes			
	0-10%	3.829 e-05	1.228 e-05	Yes	4.312 e-05	4.801 e-05	No			
$ar{\Lambda} \mathrm{K}^+$	10-30%	2.107 e-04	1.323 e-04	No	4.100 e-05	2.120 e-05	No			
	30-50%	1.219 e-04	0.598 e-04	Yes	2.723 e-04	1.877 e-04	No			

**Table 50:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA  $\Lambda(\bar{\Lambda})$  Daughters

DCA  $\Lambda(\bar{\Lambda})$  Daughters 500MeVMaxFit

			Fit Amplitudes						
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		3 1	vs 4 mm		4 ,	vs 5 mm			
	0-10%	-1.136e-02	9.416e-03	No	-2.395e-03	1.173e-03	Yes		
$\Lambda K^+$	10-30%	-2.773e-02	1.091e-01	No	-2.962e-04	1.524e-03	No		
	30-50%	1.057e-03	1.241e-03	No	-7.586e-02	3.692e-02	Yes		
	0-10%	-7.829e-03	6.509e-03	Yes	-5.710e-04	5.934e-04	No		
$ar{\Lambda} \mathrm{K}^-$	10-30%	7.443e-04	8.673e-04	No	1.088e-03	1.168e-03	No		
	30-50%	-1.225e-01	4.522e-01	No	2.278e-03	2.851e-03	Yes		
	0-10%	-1.527e-04	1.883e-04	No	-5.835e-04	6.913e-04	No		
$\Lambda K^-$	10-30%	-5.726e-02	1.965e-01	No	-4.351e-02	2.713e-01	No		
	30-50%	-1.140e-02	7.375e-03	Yes	2.958e-02	2.476e-01	No		
	0-10%	-3.676e-04	2.325e-04	No	6.753e-03	8.862e-02	No		
$ar{\Lambda} \mathrm{K}^+$	10-30%	2.291e-04	3.914e-04	No	-9.527e-04	1.492e-03	No		
	30-50%	1.108e-01	6.299e-01	No	4.620e-03	5.502e-03	No		

**Table 51:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA  $\Lambda(\bar{\Lambda})$  Daughters

DCA  $\Lambda(\bar{\Lambda})$  Daughters 500MeVMaxFit SimpleExp

DCA A(A) Daughters 300/we v MaxFit SimpleExp								
			Fit Amplitudes					
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		3 v	vs 4 mm		4 ,	vs 5 mm	•	
	0-10%	-1.170e-02	9.437e-03	No	-2.349e-03	1.142e-03	Yes	
$\Lambda K^+$	10-30%	-3.522e-04	3.863e-04	No	1.359e-05	3.543e-05	No	
	30-50%	1.090e-03	1.354e-03	No	-7.623e-02	3.708e-02	Yes	
	0-10%	-1.306e-04	1.486e-04	No	-4.771e-04	5.081e-04	No	
$ar{\Lambda} \mathrm{K}^-$	10-30%	7.482e-04	8.811e-04	No	8.166e-05	3.779e-05	Yes	
	30-50%	-7.928e-04	1.146e-03	No	-2.568e-04	8.664e-05	Yes	
	0-10%	-1.498e-04	1.562e-04	No	-5.849e-04	6.665e-04	No	
$\Lambda K^-$	10-30%	1.204e-05	2.583e-04	No	-9.794e-05	1.314e-04	No	
	30-50%	-9.314e-03	6.614e-03	No	-1.264e-04	8.487e-05	No	
	0-10%	-4.149e-04	3.296e-04	No	5.288e-05	7.505e-05	No	
$ar{\Lambda} \mathrm{K}^+$	10-30%	2.293e-04	3.396e-04	No	-8.853e-04	1.196e-03	No	
	30-50%	-6.129e-05	7.969e-04	No	1.735e-04	8.784e-05	No	

**Table 52:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA  $\Lambda(\bar{\Lambda})$  Daughters

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

	Eit Amalitudes								
		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		0.999	2 vs 0.9993		0.999	3 vs 0.9994			
	0-10%	8.394e-05	1.017e-04	Yes	6.421e-04	5.369e-04	No		
$\Lambda \mathrm{K}^+$	10-30%	3.348e-02	2.067e-02	No	7.091e-04	9.065e-04	No		
	30-50%	6.816e-03	3.887e-02	No	-4.748e-04	7.771e-04	Yes		
	0-10%	4.503e-05	5.867e-05	No	3.207e-04	8.431e-05	Yes		
$ar{\Lambda} \mathrm{K}^-$	10-30%	4.920e-04	1.040e-03	Yes	3.091e-02	6.230e-03	Yes		
	30-50%	2.214e-03	1.278e-03	No	4.164e-05	2.152e-04	No		
	0-10%	-9.043e-05	7.387e-05	Yes	1.788e-04	2.381e-04	No		
$\Lambda K^-$	10-30%	-1.058e-04	8.066e-05	Yes	5.921e-03	2.927e-03	Yes		
	30-50%	5.142e-04	1.477e-03	No	-7.095e-03	5.420e-02	No		
	0-10%	-5.468e-05	2.705e-04	No	9.797e-05	7.333e-05	Yes		
$ar{\Lambda} \mathrm{K}^+$	10-30%	-1.028e-03	1.270e-02	No	-1.389e-02	7.163e-02	No		
	30-50%	-3.528e-02	1.199e-01	No	-3.424e-02	1.862e-01	No		

Table 53:  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses:  $\Lambda(\bar{\Lambda})$  Cosine of Pointing Angle

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

	A(A) Cosine of Foliuting Angle SimpleExp								
		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		0.999	2 vs 0.9993		0.99	93 vs 0.9994			
	0-10%	2.922 e-05	0.509 e-05	Yes	6.171 e-04	4.981 e-04	No		
$\Lambda \mathrm{K}^+$	10-30%	3.356 e-02	2.061 e-02	No	7.164 e-05	15.654 e-05	No		
	30-50%	4.609 e-03	5.399 e-03	No	1.521 e-04	0.269 e-04	Yes		
	0-10%	1.210 e-05	0.552 e-05	Yes	4.543 e-05	7.800 e-05	No		
$ar{\Lambda} \mathrm{K}^-$	10-30%	4.859 e-05	3.910 e-05	No	2.357 e-05	1.279 e-05	No		
	30-50%	2.231 e-03	1.295 e-03	No	7.357 e-05	3.041 e-05	Yes		
	0-10%	5.210 e-05	0.521 e-05	Yes	1.525 e-04	1.447 e-04	No		
$\Lambda \mathrm{K}^-$	10-30%	8.230 e-05	1.066 e-05	Yes	9.685 e-05	5.080 e-05	No		
	30-50%	1.086 e-04	0.253 e-04	Yes	1.269 e-04	0.280 e-04	Yes		
	0-10%	4.122 e-05	3.995 e-05	No	3.550 e-05	0.600 e-05	Yes		
$ar{\Lambda} \mathrm{K}^+$	10-30%	1.043 e-04	0.542 e-04	No	4.208 e-05	1.228 e-05	Yes		
	30-50%	5.300 e-05	2.548 e-05	Yes	1.027 e-04	0.287 e-04	Yes		

**Table 54:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses:  $\Lambda(\bar{\Lambda})$  Cosine of Pointing Angle

 $\Lambda(\bar{\Lambda})$  Cosine of Pointing Angle 500MeVMaxFit

Ti(T) Coome of Forming Tingle Source Virtual It								
			Fit Amplitudes					
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.999	2 vs 0.9993		0.999	3 vs 0.9994		
	0-10%	2.564e-05	7.148e-05	No	5.203e-04	3.676e-04	No	
$\Lambda K^+$	10-30%	3.322e-02	2.091e-02	No	5.850e-04	8.976e-04	No	
	30-50%	4.748e-03	5.643e-03	No	-2.372e-02	8.418e-02	No	
	0-10%	4.757e-03	4.395e-02	No	6.412e-04	1.649e-03	No	
$\bar{\Lambda} \mathrm{K}^-$	10-30%	5.303e-04	1.251e-03	No	3.083e-02	6.150e-03	Yes	
	30-50%	1.818e-03	1.113e-03	No	3.013e-05	7.756e-04	No	
	0-10%	-7.716e-03	4.941e-02	No	2.136e-02	1.327e-02	Yes	
$\Lambda K^-$	10-30%	-2.561e-02	9.671e-02	No	5.935e-03	2.936e-03	Yes	
	30-50%	1.166e-04	5.787e-03	No	-8.552e-02	6.472e-01	No	
	0-10%	-3.651e-05	9.638e-05	No	7.891e-03	3.091e-02	No	
$ar{\Lambda} \mathrm{K}^+$	10-30%	-9.620e-04	1.854e-03	Yes	1.019e-04	1.806e-04	No	
	30-50%	1.642e-03	1.472e-03	No	-1.052e-03	2.182e-03	No	

Table 55:  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses:  $\Lambda(\bar{\Lambda})$  Cosine of Pointing Angle

 $\Lambda(\bar{\Lambda})$  Cosine of Pointing Angle 500MeVMaxFit SimpleExp

A(A) Cosine of Fornting Aligie 300 We v WaxFit Simple Exp								
			I	it Am	plitudes			
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
		0.999	2 vs 0.9993		0.999	3 vs 0.9994		
	0-10%	-1.448e-05	9.361e-06	No	6.215e-04	4.967e-04	No	
$\Lambda K^+$	10-30%	3.355e-02	2.063e-02	No	5.291e-04	7.270e-04	No	
	30-50%	4.609e-03	5.410e-03	No	1.360e-04	4.949e-05	Yes	
	0-10%	-4.085e-06	1.016e-05	No	1.211e-05	1.145e-05	No	
$ar{\Lambda} \mathrm{K}^-$	10-30%	1.249e-04	1.660e-04	No	-2.328e-05	2.350e-05	No	
	30-50%	2.214e-03	1.301e-03	No	-3.532e-03	4.294e-03	No	
	0-10%	3.409e-05	9.589e-06	Yes	1.170e-04	1.430e-04	No	
$\Lambda K^-$	10-30%	6.537e-05	1.967e-05	Yes	2.119e-04	2.609e-04	No	
	30-50%	-4.434e-05	4.608e-05	No	9.610e-05	5.145e-05	No	
	0-10%	-3.270e-05	5.714e-05	No	-1.744e-05	1.103e-05	No	
$ar{\Lambda} \mathrm{K}^+$	10-30%	-7.203e-05	2.042e-05	Yes	1.023e-04	1.924e-04	No	
	30-50%	2.030e-03	1.831e-03	No	7.645e-05	5.303e-05	No	

**Table 56:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses:  $\Lambda(\bar{\Lambda})$  Cosine of Pointing Angle

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

			F	it Am	plitudes		
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		0.5	vs 1 mm		1 '	vs 2 mm	'
	0-10%	0.000e+00	0.000e+00	No	-2.562e-02	2.256e-01	No
$\Lambda K^+$	10-30%	-8.206e-08	6.120e-06	No	-8.865e-03	6.253e-03	No
	30-50%	0.000e+00	0.000e+00	No	-2.358e-03	2.022e-03	No
	0-10%	0.000e+00	0.000e+00	No	-1.186e-03	1.200e-03	Yes
$ar{\Lambda} \mathrm{K}^-$	10-30%	0.000e+00	0.000e+00	No	-4.978e-04	6.611e-04	No
	30-50%	0.000e+00	0.000e+00	No	6.475e-04	2.420e-03	Yes
	0-10%	0.000e+00	0.000e+00	No	-2.843e-02	1.344e-01	No
$\Lambda K^-$	10-30%	1.759e-07	1.059e-06	No	6.419e-03	5.210e-03	No
	30-50%	0.000e+00	0.000e+00	No	-7.035e-02	2.801e-01	No
	0-10%	0.000e+00	0.000e+00	No	-4.477e-04	3.459e-04	No
$ar{\Lambda} \mathrm{K}^+$	10-30%	0.000e+00	0.000e+00	No	1.255e-03	9.275e-04	No
	30-50%	0.000e+00	0.000e+00	No	-8.232e-04	6.959e-04	No

**Table 57:**  $\Lambda(\bar{\Lambda})K^{\pm}$  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

	DCA to Primary vertex of $p^+(p^-)$ Daughter of $A(A)$ SimpleExp								
		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		0.5	5 vs 1 mm		1	vs 2 mm			
	0-10%	0.000 e-00	0.000 e-00	No	9.608 e-05	6.160 e-05	No		
$\Lambda \mathrm{K}^+$	10-30%	4.124 e-08	12.733 e-08	No	1.295 e-04	1.506 e-04	No		
	30-50%	0.000 e-00	0.000 e-00	No	2.389 e-03	1.970 e-03	No		
	0-10%	0.000 e-00	0.000 e-00	No	5.367 e-05	2.099 e-05	Yes		
$ar{\Lambda} \mathrm{K}^-$	10-30%	0.000 e-00	0.000 e-00	No	2.513 e-04	5.004 e-04	No		
	30-50%	0.000 e-00	0.000 e-00	No	4.787 e-04	3.569 e-04	No		
	0-10%	0.000 e-00	0.000 e-00	No	2.188 e-05	8.266 e-05	No		
$\Lambda K^-$	10-30%	1.712 e-07	9.950 e-07	No	6.518 e-03	5.362 e-03	No		
	30-50%	0.000 e-00	0.000 e-00	No	3.759 e-04	9.4144e-04	No		
	0-10%	0.000 e-00	0.000 e-00	No	4.498 e-04	3.527 e-04	No		
$ar{\Lambda} \mathrm{K}^+$	10-30%	0.000 e-00	0.000 e-00	No	1.046 e-03	0.793 e-03	No		
	30-50%	0.000 e-00	0.000 e-00	No	8.169 e-04	7.310 e-04	No		

**Table 58:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA to Primary Vertex of  $p^{+}(\bar{p}^{-})$  Daughter of  $\Lambda(\bar{\Lambda})$ 

DCA to Primary Vertex of  $p^+(\bar{p}^-)$  Daughter of  $\Lambda(\bar{\Lambda})$  500MeVMaxFit

			I	it Am	plitudes		
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		0.5	vs 1 mm		1	vs 2 mm	
	0-10%	0.000e+00	0.000e+00	No	-1.712e-03	4.803e-04	Yes
$\Lambda K^+$	10-30%	-3.081e-08	9.643e-07	No	-7.545e-03	5.625e-03	Yes
	30-50%	0.000e+00	0.000e+00	No	-2.433e-03	1.467e-03	No
	0-10%	0.000e+00	0.000e+00	No	-9.956e-04	1.046e-03	No
$ar{\Lambda} \mathrm{K}^-$	10-30%	0.000e+00	0.000e+00	No	-6.565e-02	3.681e-01	No
	30-50%	0.000e+00	0.000e+00	No	2.580e-02	1.941e-01	No
	0-10%	0.000e+00	0.000e+00	No	2.999e-03	2.975e-03	No
$\Lambda K^-$	10-30%	1.831e-07	1.134e-06	No	5.955e-03	4.628e-03	No
	30-50%	0.000e+00	0.000e+00	No	-2.068e-01	2.323e+00	No
	0-10%	0.000e+00	0.000e+00	No	-4.767e-04	2.701e-04	No
$ar{\Lambda} \mathrm{K}^+$	10-30%	0.000e+00	0.000e+00	No	1.151e-03	1.010e-03	No
	30-50%	0.000e+00	0.000e+00	No	-1.356e-01	1.525e+00	No

**Table 59:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA to Primary Vertex of  $p^{+}(\bar{p}^{-})$  Daughter of  $\Lambda(\bar{\Lambda})$ 

DCA to Primary Vertex of  $p^+(\bar{p}^-)$  Daughter of  $\Lambda(\bar{\Lambda})$  500MeVMaxFit SimpleExp

Dent	Dea to Timaly vertex of p (p ) Daughter of $I(N)$ 3000 viviaxi it simpled xp								
		Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		0.5	vs 1 mm		1 '	vs 2 mm			
	0-10%	0.000e+00	0.000e+00	No	-2.429e-04	2.561e-04	No		
$\Lambda \mathrm{K}^+$	10-30%	-3.554e-08	6.097e-08	No	1.598e-04	7.738e-05	Yes		
	30-50%	0.000e+00	0.000e+00	No	-2.317e-03	1.992e-03	No		
	0-10%	0.000e+00	0.000e+00	No	-9.883e-04	9.265e-04	No		
$ar{\Lambda} \mathrm{K}^-$	10-30%	0.000e+00	0.000e+00	No	-2.472e-04	5.419e-04	No		
	30-50%	0.000e+00	0.000e+00	No	1.227e-03	1.328e-03	No		
	0-10%	0.000e+00	0.000e+00	No	3.677e-03	4.028e-03	No		
$\Lambda K^-$	10-30%	1.875e-07	1.095e-06	No	6.518e-03	5.373e-03	No		
	30-50%	0.000e+00	0.000e+00	No	-2.985e-04	5.747e-04	No		
	0-10%	0.000e+00	0.000e+00	No	-4.252e-04	3.414e-04	No		
$ar{\Lambda} \mathrm{K}^+$	10-30%	0.000e+00	0.000e+00	No	1.033e-03	8.146e-04	No		
	30-50%	0.000e+00	0.000e+00	No	-7.193e-04	7.376e-04	No		

**Table 60:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA to Primary Vertex of  $p^{+}(\bar{p}^{-})$  Daughter of  $\Lambda(\bar{\Lambda})$ 

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

			F	it Amı	olitudes		
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		2	vs 3 mm		3 '	vs 4 mm	
	0-10%	-4.843e-03	1.821e-02	No	-3.108e-03	3.879e-03	No
$\Lambda \mathrm{K}^+$	10-30%	-1.895e-02	7.504e-02	No	-2.906e-02	8.290e-02	No
	30-50%	-4.478e-02	1.099e-01	No	-1.124e-03	2.850e-03	No
	0-10%	-5.539e-03	2.449e-02	No	-1.614e-04	2.137e-04	No
$ar{\Lambda} \mathrm{K}^-$	10-30%	-1.357e-04	1.308e+02	No	-3.438e-04	1.172e-04	Yes
	30-50%	6.511e-03	5.171e-03	Yes	-5.130e-04	3 vs 4 mm  03	No
	0-10%	3.514e-05	5.587e-05	Yes	-1.187e-04	8.452e-05	No
$\Lambda K^-$	10-30%	-8.213e-07	7.934e-05	Yes	-7.553e-03	3.721e-02	No
	30-50%	-4.040e-02	2.390e-01	No	-4.779e-04	4.900e-04	No
	0-10%	-3.105e-04	3.344e-04	Yes	-7.463e-05	8.161e-05	No
$ar{\Lambda} \mathrm{K}^+$	10-30%	-4.365e-04	3.362e-04	No	-7.773e-03	6.077e-02	No
	30-50%	-3.146e-02	2.417e-01	No	-2.535e-03	2.080e-03	No

**Table 61:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA to Primary Vertex of  $\pi^{-}(\pi^{+})$  Daughter of  $\Lambda(\bar{\Lambda})$ 

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

	DCATOI	illiary vertex	OI n (n) Da	ugnici	or M(M Simpl	CLXP)				
			Fit Amplitudes							
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig			
		2	vs 3 mm		3	vs 4 mm				
	0-10%	1.404 e-05	0.557 e-05	Yes	2.773 e-03	4.076 e-03	No			
$\Lambda K^+$	10-30%	5.158 e-05	4.849 e-05	No	4.003 e-05	1.537 e-05	Yes			
	30-50%	1.948 e-04	0.281 e-04	Yes	1.293 e-04	0.381 e-04	Yes			
	0-10%	3.412 e-06	31.010 e-06	No	1.292 e-05	0.737 e-05	No			
$ar{\Lambda} \mathrm{K}^-$	10-30%	4.179 e-05	1.256 e-05	Yes	3.348 e-04	2.737 e-04	No			
	30-50%	3.761 e-03	2.491 e-03	No	5.462 e-04	10.737 e-04	No			
	0-10%	3.044 e-05	0.577 e-05	Yes	5.793 e-05	8.022 e-05	No			
$\Lambda K^-$	10-30%	4.823 e-05	1.221 e-05	Yes	8.026 e-05	1.586 e-05	Yes			
	30-50%	8.278 e-05	13.261 e-05	No	1.516 e-04	0.395 e-04	Yes			
	0-10%	1.995 e-05	1.807 e-05	No	1.645 e-05	0.714 e-05	Yes			
$ar{\Lambda} \mathrm{K}^+$	10-30%	4.629 e-04	3.597 e-04	No	7.971 e-05	1.562 e-05	Yes			
	30-50%	2.733 e-04	0.291 e-04	Yes	2.922 e-04	3.621 e-04	No			

**Table 62:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA to Primary Vertex of  $\pi^{-}(\pi^{+})$  Daughter of  $\Lambda(\bar{\Lambda})$ 

DCA to Primary Vertex of  $\pi^-(\pi^+)$  Daughter of  $\Lambda(\bar{\Lambda})$  500MeVMaxFit

			I	Fit Am	plitudes		
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig
		2 .	vs 3 mm		3 '	vs 4 mm	'
	0-10%	-2.578e-03	4.473e-02	No	-3.254e-03	4.068e-03	No
$\Lambda K^+$	10-30%	5.165e-04	7.025e-04	No	-4.162e-03	3.253e-03	No
	30-50%	1.504e-02	5.178e-03	Yes	-3.467e-02	2.791e-01	No
	0-10%	1.026e-03	1.045e-03	No	-9.881e-03	3.186e-02	No
$\bar{\Lambda} \mathrm{K}^-$	10-30%	-1.050e-04	2.779e-04	No	-1.161e-02	6.045e-02	No
	30-50%	5.187e-03	5.521e-03	No	-3.825e-04	vs 4 mm  4.068e-03 3.253e-03 2.791e-01 3.186e-02	No
	0-10%	-2.588e-03	3.666e-02	No	-5.881e-03	6.284e-02	No
$\Lambda K^-$	10-30%	5.937e-03	2.872e-04	Yes	2.942e-02	1.801e-02	No
	30-50%	3.185e-03	2.838e-03	No	-9.919e-03	9.801e-03	No
	0-10%	-2.047e-04	6.630e-04	No	-3.852e-05	9.646e-05	No
$ar{\Lambda} \mathrm{K}^+$	10-30%	-1.088e-02	2.905e-04	Yes	-3.925e-03	3.920e-03	Yes
	30-50%	1.456e-05	3.774e-04	No	-2.516e-03	2.087e-03	No

**Table 63:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA to Primary Vertex of  $\pi^{-}(\pi^{+})$  Daughter of  $\Lambda(\bar{\Lambda})$ 

DCA to Primary Vertex of  $\pi^-(\pi^+)$  Daughter of  $\Lambda(\bar{\Lambda} 500 \text{MeVMaxFit SimpleExp})$ 

DCA to Finnary vertex of $n$ ( $n$ ) Daughter of $A(A)$ Soome viviaxi it simple exp)									
	Pair Type   Centrality   Am		I	Fit Am <sub>l</sub>	plitudes				
Pair Type	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
		2 .	vs 3 mm		3 '	vs 4 mm			
	0-10%	7.991e-02	3.641e-01	No	-2.774e-03	3.759e-03	No		
$\Lambda K^+$	10-30%	-2.559e-05	5.097e-05	No	-4.152e-03	3.267e-03	No		
	30-50%	1.461e-02	5.067e-03	Yes	-8.144e-05	3.055e-04	No		
	0-10%	-9.069e-06	1.070e-05	No	-1.506e-04	2.900e-04	No		
$ar{\Lambda} \mathrm{K}^-$	10-30%	1.485e-05	2.273e-05	No	-2.281e-04	2.219e-04	No		
	30-50%	3.830e-03	2.477e-03	No	-2.258e-04	8.241e-04	No		
	0-10%	-4.017e-05	5.473e-05	No	-3.418e-05	5.661e-05	No		
$\Lambda K^-$	10-30%	6.474e-05	7.444e-05	No	4.487e-04	6.332e-04	No		
	30-50%	3.344e-03	3.224e-03	No	9.751e-05	7.055e-05	No		
	0-10%	2.080e-05	1.035e-05	Yes	-1.947e-05	9.814e-05	No		
$ar{\Lambda} \mathrm{K}^+$	10-30%	-4.528e-04	3.642e-04	No	6.138e-05	2.809e-05	Yes		
	30-50%	2.643e-04	5.272e-05	Yes	-2.107e-03	1.815e-03	No		

**Table 64:**  $\Lambda(\bar{\Lambda})K^{\pm}$  Analyses: DCA to Primary Vertex of  $\pi^{-}(\pi^{+})$  Daughter of  $\Lambda(\bar{\Lambda})$ 

Average Separation of  $\Lambda(\bar{\Lambda})$  Daughter With Same Charge as  $K^\pm$ 

				, , , <u>, , , , , , , , , , , , , , , , </u>			<u> </u>				
				Fit Amplitudes							
Pair Type	Daughter	Track	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
				7	vs 8 mm		8 '	vs 9 mm			
			0-10%	-3.686e-06	1.868e-06	Yes	-2.810e-06	2.876e-06	Yes		
$\Lambda \mathrm{K}^+$	$p(\Lambda)$	K <sup>+</sup>	10-30%	1.913e-06	3.456e-06	Yes	4.146e-06	2.760e-06	No		
			30-50%	2.437e-05	2.000e-05	Yes	4.171e-06	2.107e-05	Yes		
			0-10%	7.353e-07	2.091e-06	Yes	-3.354e-05	6.745e-06	Yes		
$\bar{\Lambda} \mathrm{K}^-$	$ar{p}^-(ar{\Lambda})$	K <sup>-</sup>	10-30%	-2.786e-05	7.575e-06	Yes	8.456e-07	6.874e-06	Yes		
			30-50%	3.246e-03	2.576e-04	Yes	2.117e-05	2.576e-05	Yes		
			0-10%	-2.628e-05	3.735e-06	Yes	4.464e-06	3.426e-06	Yes		
$\Lambda K^-$	$\pi^-(\Lambda)$	K <sup>-</sup>	10-30%	-8.931e-08	7.490e-06	Yes	4.327e-06	8.289e-06	Yes		
			30-50%	-8.489e-06	1.854e-05	No	6.277e-05	2.490e-05	Yes		
			0-10%	-4.788e-06	2.222e-06	Yes	-3.779e-06	1.987e-06	Yes		
$ar{\Lambda} \mathrm{K}^+$	$\pi^+(ar{\Lambda})$	K <sup>+</sup>	10-30%	6.776e-06	6.238e-06	Yes	1.142e-05	3.740e-06	Yes		
			30-50%	5.680e-04	1.505e-04	Yes	2.448e-06	2.452e-05	Yes		

**Table 65:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses: Average Separation of  $\Lambda(\bar{\Lambda})$  Daughter With Same Charge as  $K^\pm$ 

Average Separation of  $\Lambda(\bar{\Lambda})$  Daughter With Same Charge as  $K^{\pm}$  SimpleExp

	Average separation of $\Lambda(\Lambda)$ Daughter with Same Charge as K. SimpleExp										
				Fit Amplitudes							
Pair Type	Daughter	Track	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
				7	vs 8 mm		8	vs 9 mm			
			0-10%	1.292 e-06	0.071 e-06	Yes	4.293 e-06	0.467 e-06	Yes		
$\Lambda \mathrm{K}^+$	$p(\Lambda)$	K <sup>+</sup>	10-30%	1.273 e-06	0.918 e-06	No	2.789 e-06	6.481 e-06	No		
			30-50%	5.756 e-06	0.884 e-06	Yes	1.039 e-05	0.366 e-05	Yes		
			0-10%	2.174 e-06	0.382 e-06	Yes	7.280 e-07	0.192 e-07	Yes		
$ar{\Lambda} \mathrm{K}^-$	$ar{p}^-(ar{\Lambda})$	K <sup>-</sup>	10-30%	4.654 e-06	0.264 e-06	Yes	4.714 e-06	0.790 e-06	Yes		
			30-50%	3.859 e-03	0.282 e-03	Yes	1.617 e-05	0.460 e-05	Yes		
			0-10%	4.837 e-06	0.126 e-06	Yes	5.328 e-06	0.606 e-06	Yes		
$\Lambda K^-$	$\pi^-(\Lambda)$	K <sup>-</sup>	10-30%	4.573 e-06	1.194 e-06	Yes	5.761 e-06	1.170 e-06	Yes		
			30-50%	7.689 e-06	1.176 e-06	Yes	7.790 e-06	1.120 e-06	Yes		
			0-10%	1.913 e-06	1.201 e+00	No	1.546 e-06	0.073 e-06	Yes		
$ar{\Lambda} \mathrm{K}^+$	$\pi^+(ar{\Lambda})$	K <sup>+</sup>	10-30%	3.534 e-06	1.269 e-06	Yes	2.443 e-07	1.002 e+00	No		
			30-50%	6.155 e-04	1.712 e-04	Yes	7.848 e-06	0.108 e-06	Yes		

**Table 66:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses: Average Separation of  $\Lambda(\bar{\Lambda})$  Daughter With Same Charge as  $K^\pm$ 

Average Separation of  $\Lambda(\bar{\Lambda})$  Daughter With Same Charge as  $K^{\pm}$  500MeVMaxFit

					Fit Amplitudes						
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Pair Type	Daughter	Track	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig		
				7	vs 8 mm		8 '	vs 9 mm			
			0-10%	-1.028e-03	1.913e-04	Yes	-8.595e-04	1.950e-04	Yes		
$\Lambda \mathrm{K}^+$	p(A)	K <sup>+</sup>	10-30%	-1.165e-04	2.697e-05	Yes	-3.465e-05	2.604e-05	Yes		
			30-50%	-1.402e-04	1.330e+01	No	3.312e-05	8.428e-05	No		
			0-10%	-1.186e-03	2.039e-04	Yes	-1.314e-03	2.545e-04	Yes		
$ar{\Lambda} \mathrm{K}^-$	$ar{p}^-(ar{\Lambda})$	K <sup>-</sup>	10-30%	-2.705e-05	2.832e-05	Yes	-5.341e-05	2.923e-05	Yes		
			30-50%	1.314e-03	1.515e-04	Yes	1.459e-04	8.739e-05	No		
			0-10%	-5.785e-05	1.394e-05	Yes	-4.428e-05	1.198e-05	Yes		
$\Lambda K^-$	$\pi^-(\Lambda)$	K <sup>-</sup>	10-30%	-4.576e-05	5.522e-05	No	-5.990e-05	1.099e-05	Yes		
			30-50%	4.274e-03	4.150e-03	No	6.659e-05	6.463e-05	No		
			0-10%	-2.609e-04	1.122e-04	Yes	-4.269e-05	3.663e-05	No		
$ar{\Lambda} \mathrm{K}^+$	$\pi^+(ar{\Lambda})$	K <sup>+</sup>	10-30%	-2.366e-04	1.483e-04	Yes	-7.622e-05	1.096e-04	No		
			30-50%	2.265e-03	9.486e-04	Yes	2.629e-04	2.138e-04	No		

**Table 67:**  $\Lambda(\bar{\Lambda})K^0_S$  Analyses: Average Separation of  $\Lambda(\bar{\Lambda})$  Daughter With Same Charge as  $K^\pm$ 

Average Separation of  $\Lambda(\bar{\Lambda})$  Daughter With Same Charge as  $K^{\pm}$  500MeVMaxFit SimpleExp

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				Fit Amplitudes						
Pair Type	Daughter	Track	Centrality	Amplitude	Error	Sig	Amplitude	Error	Sig	
				7 ,	vs 8 mm		8 '	vs 9 mm		
			0-10%	1.310e-06	1.696e-07	Yes	4.374e-06	2.246e-07	Yes	
$\Lambda K^+$	p(A)	K <sup>+</sup>	10-30%	2.084e-06	4.698e-07	Yes	4.124e-06	4.593e-06	No	
			30-50%	-1.186e-03	9.739e-04	No	3.110e-05	3.395e-05	No	
			0-10%	2.057e-06	1.499e-07	Yes	3.829e-06	1.327e-07	Yes	
$ar{\Lambda} \mathrm{K}^-$	$ar{p}^-(ar{\Lambda})$	K <sup>-</sup>	10-30%	7.002e-06	6.292e-06	No	4.608e-06	4.256e-06	No	
			30-50%	4.608e-06	4.256e-06	No	9.199e-05	7.119e-05	No	
			0-10%	4.686e-06	3.491e-07	Yes	2.311e-06	5.498e-07	Yes	
$\Lambda K^-$	$\pi^-(\Lambda)$	K <sup>-</sup>	10-30%	5.411e-06	7.471e-07	Yes	7.344e-06	5.583e-07	Yes	
			30-50%	2.045e-04	1.593e-04	No	1.570e-04	3.330e-04	No	
			0-10%	-3.063e-04	1.137e-04	Yes	-6.134e-05	6.307e-05	No	
$ar{\Lambda} \mathrm{K}^+$	$\pi^+(ar{\Lambda})$	K <sup>+</sup>	10-30%	6.019e-06	6.879e-07	Yes	1.473e-06	1.292e-06	No	
			30-50%	1.773e-04	6.857e-05	Yes	1.701e-04	1.120e-04	No	

**Table 68:**  $\Lambda(\bar{\Lambda})K_S^0$  Analyses: Average Separation of  $\Lambda(\bar{\Lambda})$  Daughter With Same Charge as  $K^\pm$