„Old“ Sample (mS = 2000 GeV, beta* = 0.2, Delta10 = 90 GeV, cTau = 4 m)

	# Events	Efficiency	Cummmulative	Info
All	10000	100,0 %	100,0 %	
Eta cut	8674	86,7 %	86,7 %	$\|\eta\| < 3.2$ for both Higgs cluster
Energy threshold	4814	55,5 %	48,1 %	40 GeV < E_T < 100 GeV for on-Time Higgs cluster 40 GeV < ET for out-of-Time Higgs cluster
Delta Phi	1474	30,6 %	14,7 %	$\Delta\phi > \pi - 1$ between both Higgs cluster
Decay Position	1462	99,2 %	14,6 %	Decay Vertex L_{xy} < 4 m
Decay Time	125	8,5 %	1,3 %	Decay Vertex time: 0 < t < 10 ns for on-Time 25 < t < 35 ns for out-of-Time decay

Pythia Sample (mS = 2000 GeV, beta* = 0.2, Delta10 = 90 GeV, cTau = 4 m)

	# Events	Efficiency	Cummmulative	Info
All	10000	100,0 %	100,0 %	
Eta cut	9415	94,2 %	94,2 %	$\|\eta\| < 3.2$ for both Higgs cluster
Energy threshold	5157	54,8 %	51,6 %	40 GeV < E_T < 100 GeV for on-Time Higgs cluster 40 GeV < ET for out-of-Time Higgs cluster
Delta Phi	1741	33,8 %	17,4 %	$\Delta\phi > \pi$ - 1 between both Higgs cluster
Decay Position	1694	97,3 %	16,9 %	Decay Vertex L_{xy} < 4 m
Decay Time	155	9,1 %	1,6 %	Decay Vertex time: 0 < t < 10 ns for on-Time 25 < t < 35 ns for out-of-Time decay

MadGraph Sample (mS = 2000 GeV, beta* = 0.2, Delta10 = 90 GeV, cTau = 4 m)

	# Events	Efficiency	Cummmulative	Info
All	10000	100,0 %	100,0 %	
Eta cut	9371	93,7 %	93,7 %	$\|\eta\| < 3.2$ for both Higgs cluster
Energy threshold	4474	47,7 %	44,7 %	40 GeV < E_T < 100 GeV for on-Time Higgs cluster 40 GeV < ET for out-of-Time Higgs cluster
Delta Phi	1619	36,2 %	16,2 %	$\Delta\phi > \pi - 1$ between both Higgs cluster
Decay Position	1575	97,3 %	15,8 %	Decay Vertex L_{xy} < 4 m
Decay Time	129	8,2 %	1,3 %	Decay Vertex time: 0 < t < 10 ns for on-Time 25 < t < 35 ns for out-of-Time decay