

Table of Contents

Samples for validation of the simulation.....	1
For Autumn 2012 validation testing.....	1
For EM Physics List tests:.....	1
For Calorimeter response tests/calibration with chosen EM Physics List - two included below are possible lists.....	2
For detectors/tracking studies, with various EM lists and dE/dx implementations.....	3
For physics/all, with various hadronic lists, fixed EM list - Em list depends on above tests...	4
2011 validation samples.....	4

Samples for validation of the simulation

Different sets of sample can be produced for validation. They range from particle guns for calibration and investigation, to physics signal channels that will then be looked at by responsible persons that will report on the results before the start of a major production in a Simulation Meeting.

For the moment only a global table is given where everybody can add their reference event type, specifying the type of output (xgen, sim, digi, dst), if the trigger has to be run, how much data is needed, physics working (sub-)group, MC contact and person responsible for looking at the data. If an event type is already been listed by somebody else, just indicated in the field **Comments** that somebody else from your working group will look at it and if the statistics is sufficient or you need more.

For Autumn 2012 validation testing

For EM Physics List tests:

EventType	DecFiles	No. of events	Output	Beam Conditions	G4 release	em Physics List	Hadr. Physics List	Trigger	Stripping	V
52210xxx	mu+mu-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmNoCuts	LHEP	no	no	S V T
51210xxx	e+e-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmNoCuts	LHEP	no	no	S V T
53210xxx	pi+pi-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmNoCuts	LHEP	no	no	S V T
52210xxx	mu+mu-,fixP=TrkAcc	50k each	sim	Fix1	v94r2p6	EmNoCuts	LHEP	no	no	S V T
51210xxx	e+e-,fixP=TrkAcc	50k each	sim	Fix1	v94r2p6	EmNoCuts	LHEP	no	no	S V T
53210xxx	pi+pi-,fixP=TrkAcc	50k each	sim	Fix1	v94r2p6	EmNoCuts	LHEP	no	no	S V T
52210xxx	mu+mu-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmStd	LHEP	no	no	S V T
51210xxx	e+e-,fixP=TrkAcc	50k	sim	Fix1	v95r2	EmStd	LHEP	no	no	S

ValidationSamples < LHCb < TWiki

		each								
53210xxx	pi+pi-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmStd	LHEP	no	no	
52210xxx	mu+mu-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmOpt1	LHEP	no	no	
51210xxx	e+e-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmOpt1	LHEP	no	no	
53210xxx	pi+pi-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmOpt1	LHEP	no	no	
52210xxx	mu+mu-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmOpt3	LHEP	no	no	
51210xxx	e+e-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmOpt3	LHEP	no	no	
53210xxx	pi+pi-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmOpt3	LHEP	no	no	
52210xxx	mu+mu-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmLHCb	LHEP	no	no	
51210xxx	e+e-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmLHCb	LHEP	no	no	
53210xxx	pi+pi-,fixP=TrkAcc	50k each	sim	Fix1	v95r2	EmLHCb	LHEP	no	no	

For Calorimeter response tests/calibration with chosen EM Physics List - two included below are *possible* lists

EventType	DecFiles	No. of	Output	Beam	G4	em Physics	Hadr.	Trigger	Stripping	V
-----------	----------	--------	--------	------	----	------------	-------	---------	-----------	---

For EM Physics List tests:

ValidationSamples < LHCb < TWiki

		events		Conditions	release	List	Physics List			
56000xxx	gamma,fixE=CaloAcc	50k each	xdigi	Fix1	v95r2	EmNoCuts	LHEP	no	no	C G ar ca
53200xxx	pi+pi-,fixP=CaloAcc	50k each	xdigi	Fix1	v95r2	EmNoCuts	LHEP	no	no	C G ar ca
51000xxx	e-,fixP=CaloAcc	50k each	xdigi	Fix1	v95r2	EmNoCuts	LHEP	no	no	C G ar ca
56000xxx	gamma,fixE=CaloAcc	50k each	xdigi	Fix1	v95r2	EmLHCb	LHEP	no	no	C G ar ca
53200xxx	pi+pi-,fixP=CaloAcc	50k each	xdigi	Fix1	v95r2	EmLHCb	LHEP	no	no	C G ar ca
51000xxx	e-,fixP=CaloAcc	50k each	xdigi	Fix1	v95r2	EmLHCb	LHEP	no	no	C G ar ca

For detectors/tracking studies, with various EM lists and dE/dx implementations

EventType	DecFiles	No. of events	Output	Beam Conditions	G4 release	dE/dx	em Physics List	Hadr. Physics List	Trigger	Stripping	Work Gro
3000000	mbias	50k	xdst	Beam at 4.0 (fix interactions)	v94r2p6	LHCb	EmNoCuts	LHEP	no	no	tbd
3000000	mbias	50k	xdst	Beam at 4.0 (fix interactions)	v95r2	LHCb	EmNoCuts	LHEP	no	no	tbd

For Calorimeter response tests/calibration with chosen EM Physics List - two included below are possible lists

ValidationSamples < LHCb < TWiki

3000000	mbias	50k	xdst	Beam at 4.0 (fix interactions)	v95r2	LHCb	EmLHCb	LHEP	no	no	tbd
3000000	mbias	50k	xdst	Beam at 4.0 (fix interactions)	v95r2	G4	EmNoCuts	LHEP	no	no	tbd
3000000	mbias	50k	xdst	Beam at 4.0 (fix interactions)	v95r2	G4	EmLHCb	LHEP	no	no	tbd

For physics/all, with various hadronic lists, fixed EM list - Em list depends on above tests

EventType	DecFiles	No. of events	Output	Beam Conditions	G4 release	em Physics List	Hadr. Physics List	Trigger	Stripping
1000000	incl_b	1M	xdst	Beam at 4.0 (fix interactions)	v95r2	EmNoCuts	LHEP	no	no
1000000	incl_b	1M	xdst	Beam at 4.0 (fix interactions)	v95r2	EmNoCuts	QGSP_FTFP_BERT	no	no
1000000	incl_b	1M	xdst	Beam at 4.0 (fix interactions)	v95r2	EmNoCuts	QGSP_BERT_CHIPS	no	no

2011 validation samples

The list of samples produced for validation in 2011 for Sim05 the data collected in 2011, 2011-Sim05 (a.k.a. MC11) can be found here

-- *Last edited* GloriaCorti - 11-Jan-2013

This topic: LHCb > ValidationSamples

Topic revision: r66 - 2013-01-17 - GloriaCorti



Copyright &© 2008-2019 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.

Ideas, requests, problems regarding TWiki? Send feedback