Reconstruction Code Profiling

Profiler Output

The output of JProfiler gives a good idea of what is going on in the code. The following profiles are available:

Version	Date	Steering File	Detector	Profile	Benchmark	Comment
Pass1	2015/8/1	EngineeringRun2015FullRecon.lcsim	HPS-EngRun2015-Nominal-v1	EvioToLcio: http://nuclear.unh.edu/HPS/Profiles/Call_Tree_EvioToLcio.xml		
Pass1	2015/8/1	EngineeringRun2015FullRecon.lcsim	HPS-EngRun2015-Nominal-v1	doProcess: http://nuclear.unh.edu/HPS/Profiles/Call_Tree_doProcess.xml	0.11704 sec/event	
r3393	2015/8/25	EngineeringRun2015FullRecon.lcsim	HPS-EngRun2015-Nominal-v1	doProcess: http://nuclear.unh.edu/HPS/Profiles/Call_Tree_doProcess_2015_08_24a.xml	0.06899 sec/event	Sho fixed leftover debugging code in tracking
r3557	2015/9/9	EngineeringRun2015FullRecon.lcsim	HPS-EngRun2015-Nominal-v1		0.0697 sec/event	
r3557	2015/9/9	EngineeringRun2015FullRecon_Pass2.lcsim	HPS-EngRun2015-Nominal-v1		0.1117 sec/event	Extra tracking strategies.
r3557	2015/9/9	EngineeringRun2015FullRecon_Pass2.lcsim	HPS-EngRun2015-Nominal-v3-fieldmap		0.1183 sec/event	Fieldmap added, new geometry.
r3740	2015/9/30	EngineeringRun2015FullRecon_Pass2.lcsim	HPS-EngRun2015-Nominal-v3-fieldmap	doProcess: http://nuclear.unh.edu/HPS/Profiles/Call_Tree_doProcess_2015_08_24a.xml	0.1321 sec/event	
r3915	2015/10/31	EngineeringRun2015FullRecon.lcsim	HPS-EngRun2015-Nominal-v3-fieldmap	http://nuclear.unh.edu/HPS/Profiles/Call_Tree_doProcess_r3915_2015 _10_31.xml http://nuclear.unh.edu/HPS/Profiles/Call_Tree_doProcess_r3915_2015_11_02_dynamic.xml		The two different files were profiled with different methods. The first one by "sampling", the second one "dynamically", by automatically inserting marker code into the Java for each method. Sampling is supposed to give a more accurate reflection of the fraction of time spend in a particular method. Dynamic gives the call counts and will include every method, even those that completed quickly.
git master	2017/05/05	EngineeringRun2015FullRecon.lcsim	HPS-EngRun2015-Nominal-v4-4-fieldmap	http://nuclear.unh.edu/HPS/Profiles/Call_Tree_doProcess_2017_05_05.xml	0.165 sec/event	git tag: 9a27ffe9914a10174fbf9bc8e2daedd08b7858eb
git master	2017/10/26	EngineeringRun2015FullRecon.lcsim	HPS-EngRun2015-Nominal-v4-4-fieldmap	http://nuclear.unh.edu/HPS/Profiles/Call_Tree_doProcess_2017_10_26.xml	.07258 sec/event	git tag: c1f1fdb9197ee7ffd5ad9be2cc3b8ede2d6924a8
git master	2018/11/30	EngineeringRun2015FullRecon.lcsim	HPS-EngRun2015-Nominal-v4-4-fieldmap	http://nuclear.unh.edu/HPS/Profiles/Call_Tree_doProcess_2018_11_30.xml	0.0838 sec/event	git tag: 607f1f07d0b721057ee9b0a7f3f573b2d4a3182a New code with MOUSE.
git master	2018/11/30	PhysicsRun2016FullRecon.lcsim	HPS-PhysicsRun2016-Pass2	http://nuclear.unh.edu/HPS/Profiles/Call_Tree_doProcess_2018_12_11.xml	0.05303 sec/event	git tag: bf85345b612276b8d486b793e2a6be0aee0c0bf6

Readout Code Profiling

Version	Date	Steeringfile	Input	Profile	Benchmark	Comment
git master	2017/05/10	EngineeringRun2015TrigPairs1_Pass2.lcsim	wabv3SF-egsv5-triv2MG5-g4v1_HPS-EngRun2015-Nominal-v5-0-fieldmap_777.slcio	http://nuclear.unh.edu/HPS/Profiles/Readout_doProcess_2017_05_10.xml	1.0904 ms/event = 917.1 events/second	git tag: 9a27ffe9914a10174fbf9bc8e2daedd08b7858eb

Benchmark performed on the first 10,000 events of run 5772 (file 0), on a 2.6 GHz Intel Core i7 laptop .