



7.7 GeV QA (BES II)

Emmy Duckworth

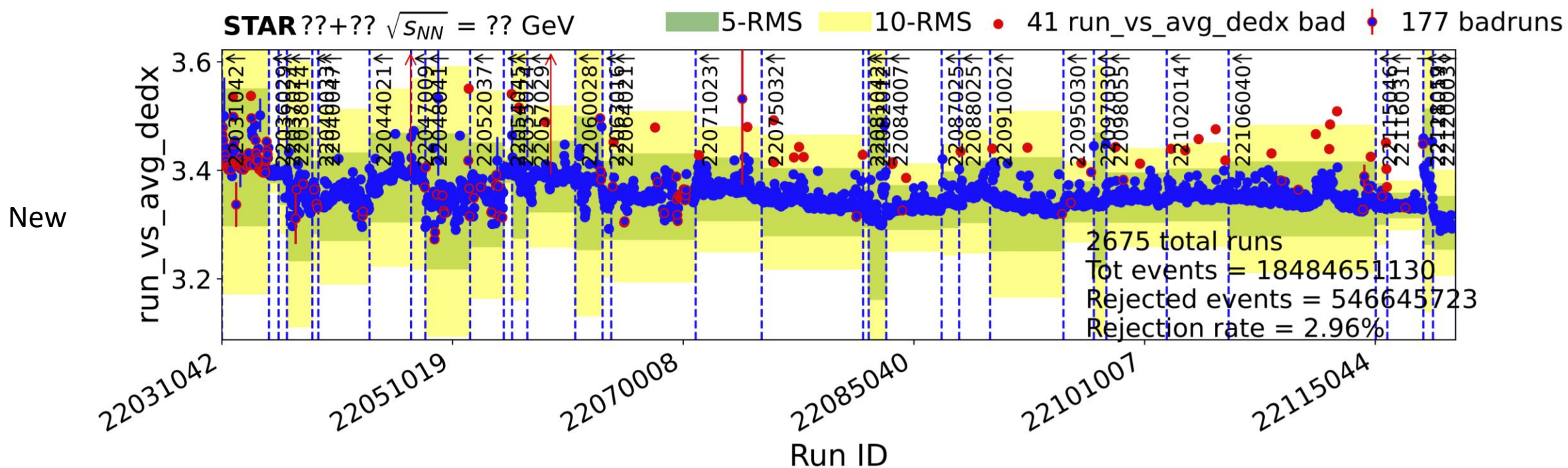
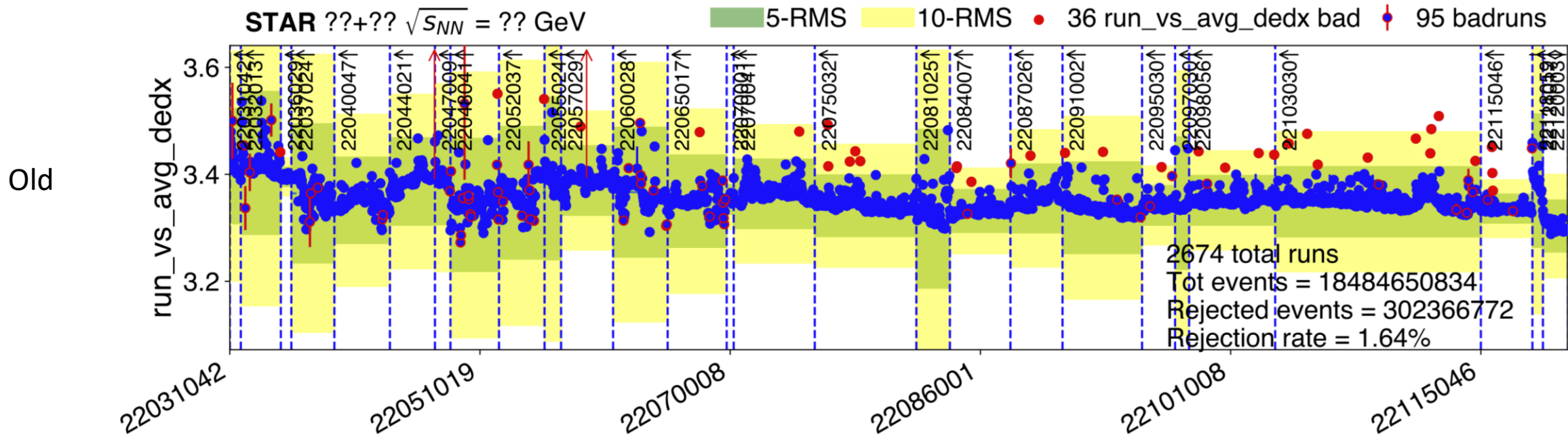
Overview

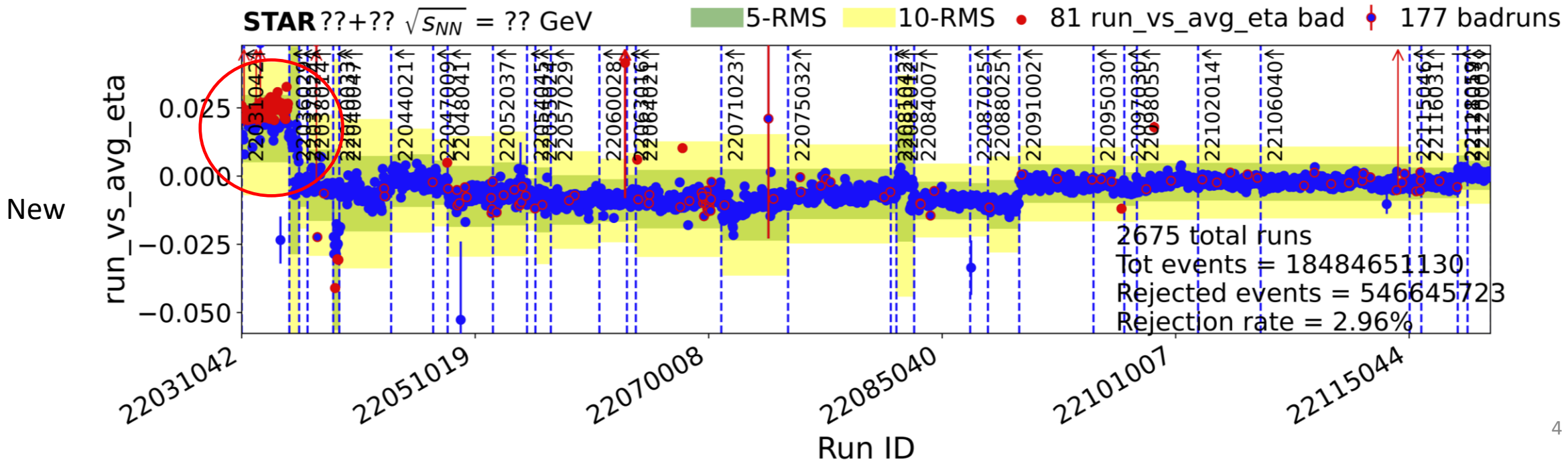
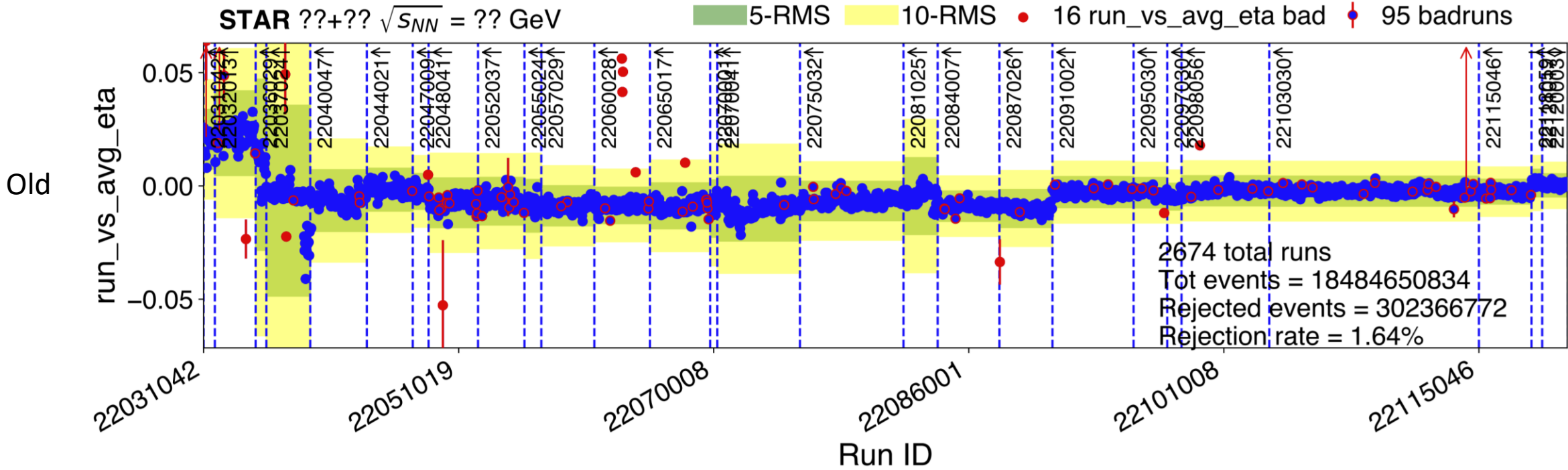
- Production=P22ib, Library=SL22b
- MinBias Trigger Selection: 810010, 810020, 810030, 810040
- Event cuts:
 - $|V_z| < 145\text{cm}$
 - $|V_r| < 2\text{cm}$
 - 479M events before cuts
 - 134M events after cuts
- Track cuts:
 - Primary track
 - $Dca < 3.0\text{cm}$
 - $n\text{HitsFit} \geq 10$
 - $n\text{HitsDedx} \geq 10$
 - $|\eta| < 1.5$

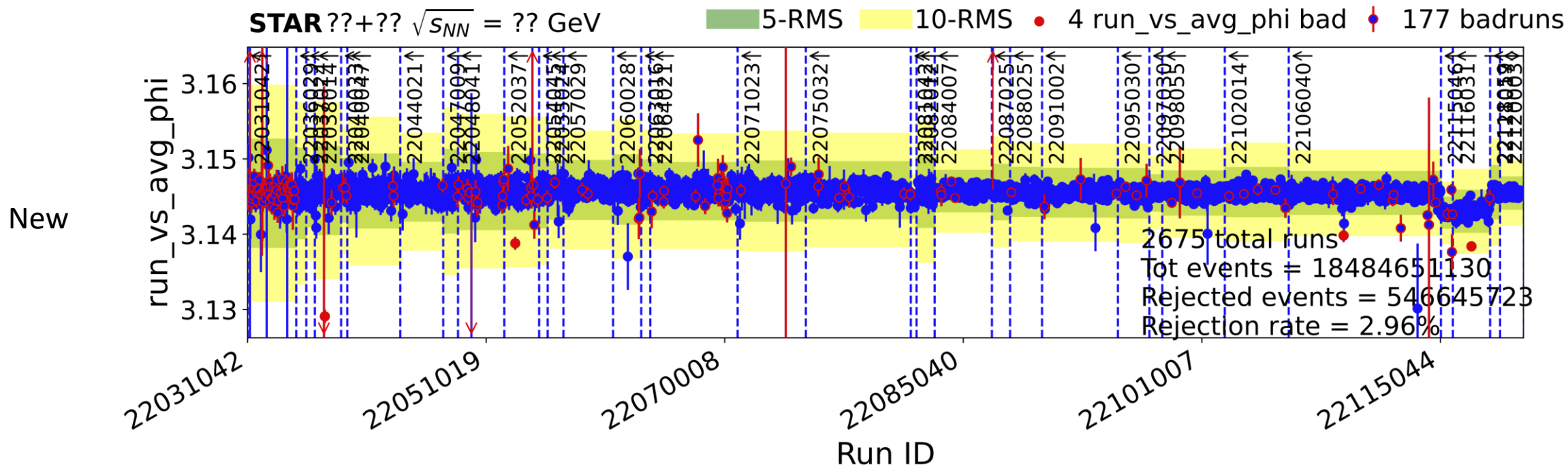
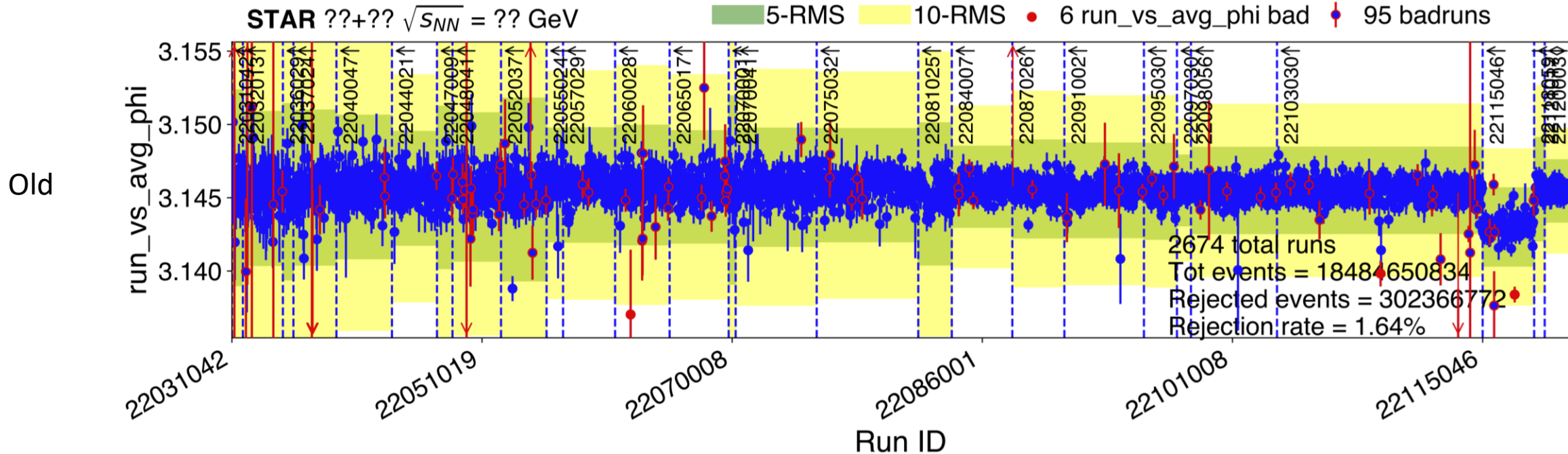
Variables for QA:

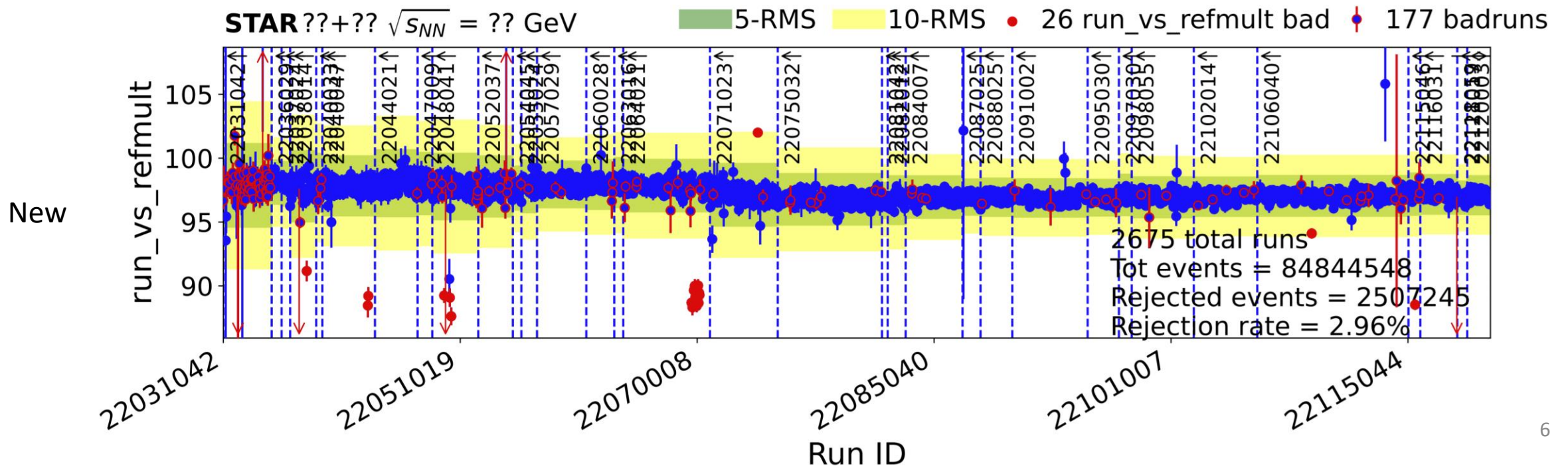
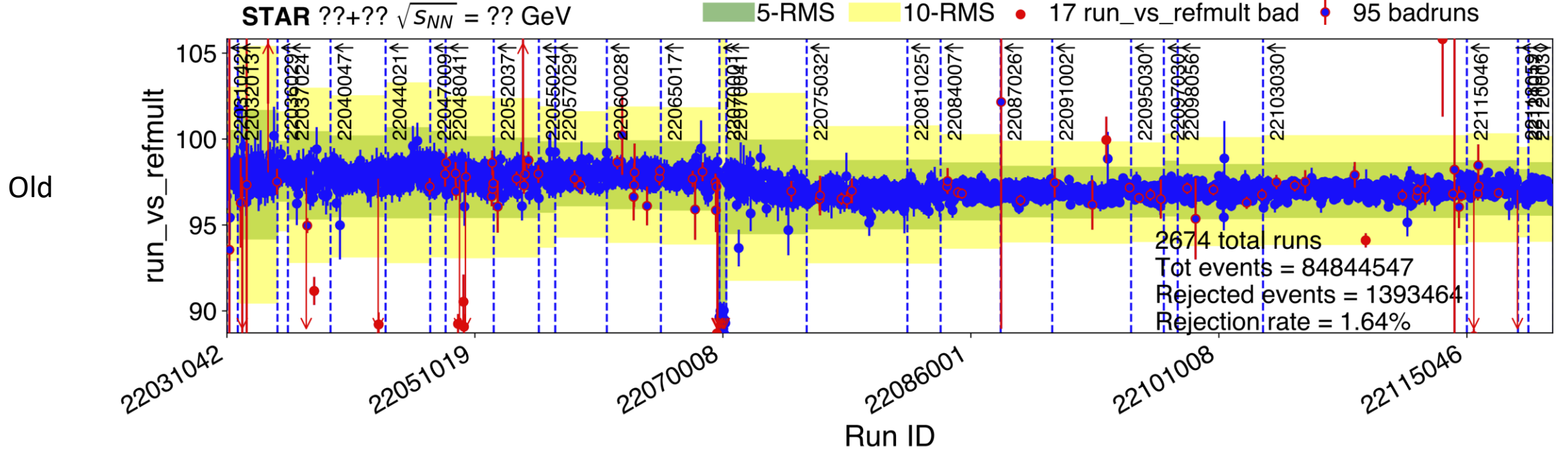
- Average eta
- Average phi
- Average dE/dx
- Average sDCAxy
- RMS sDCAxy
- Refmult (cut Refmult>20)

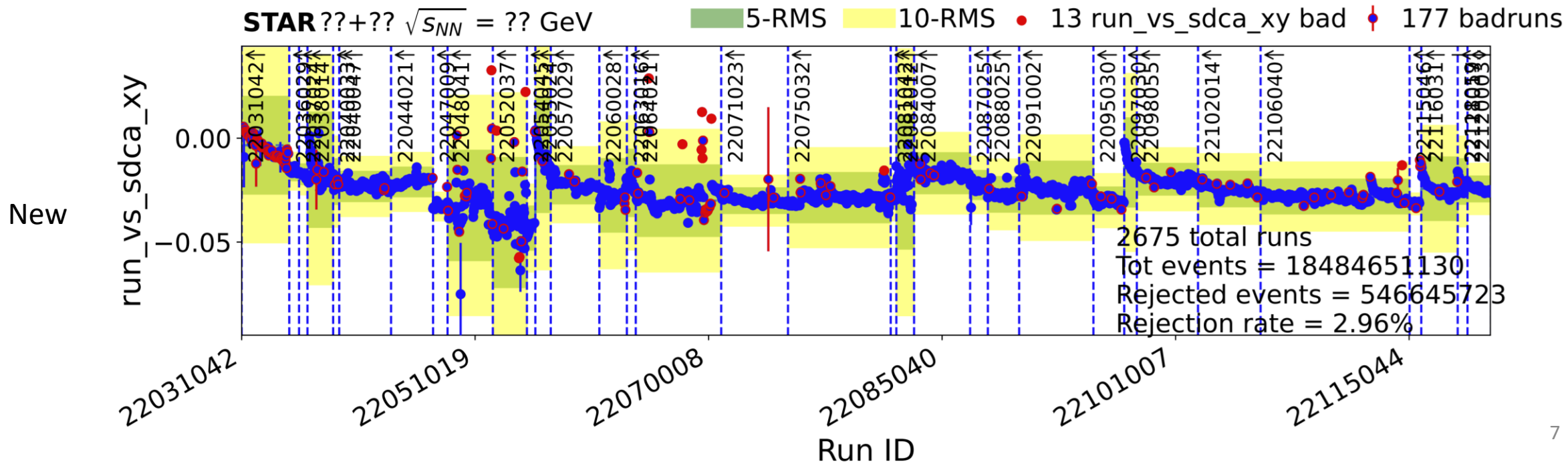
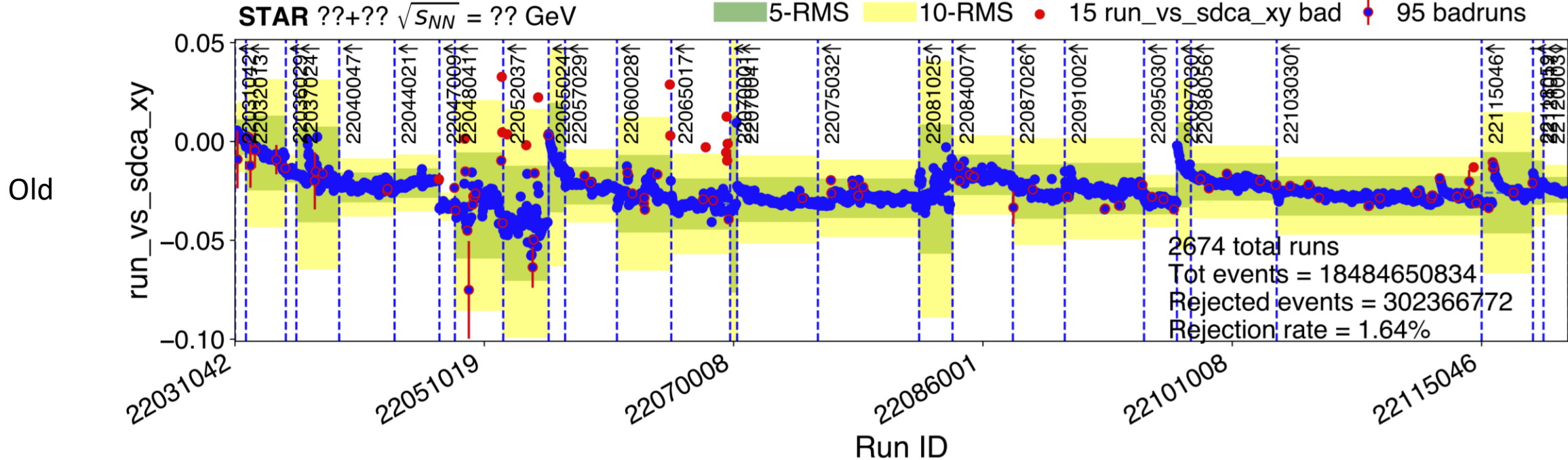
This will be a comparison between using Tommy Tsang's RBR QA v3 and v3.1

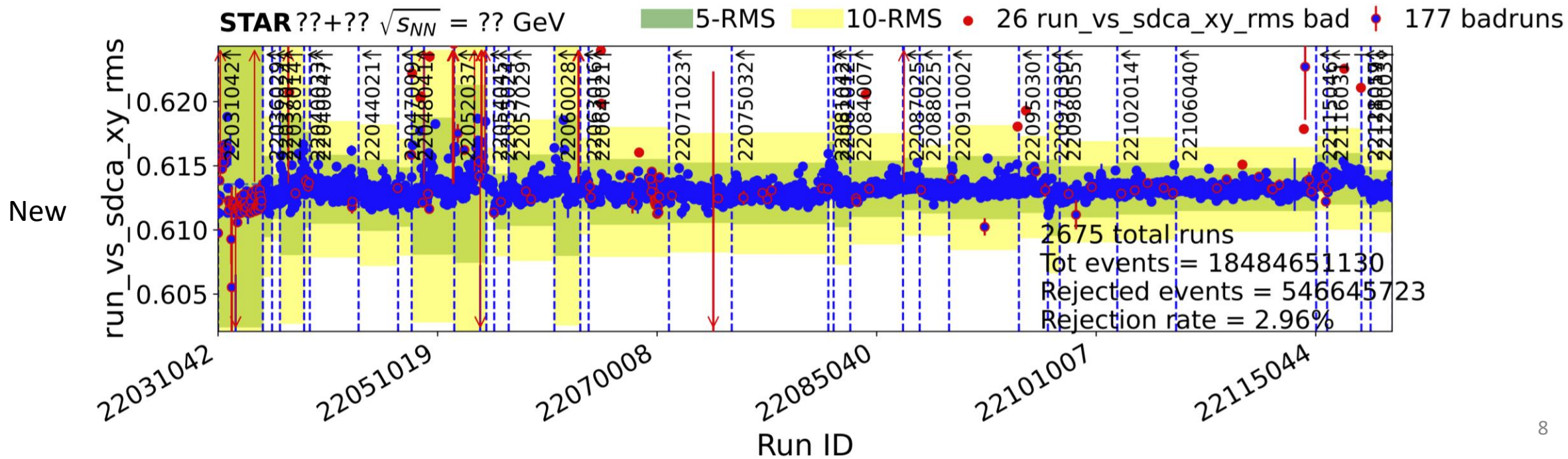
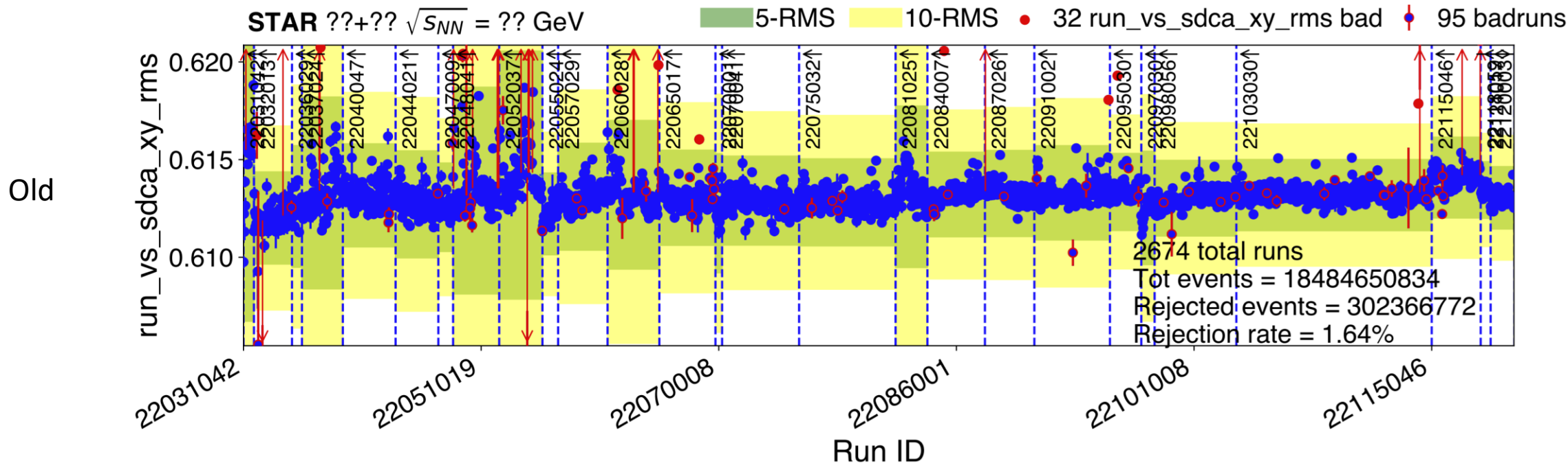












22031042	run_vs_avg_eta	22035003	run_vs_avg_eta	22052048	run_vs_sdca_xy		
22031043	run_vs_avg_eta	22035009	run_vs_avg_eta	22053022	run_vs_avg_phi		
22031045	run_vs_avg_eta	22035016	run_vs_avg_eta	22054007	run_vs_sdca_xy_rms		
22031053	run_vs_avg_eta	22035017	run_vs_avg_eta	22054023	run_vs_sdca_xy	22076034	run_vs_avg_dedx
22031055	run_vs_avg_eta	22035019	run_vs_avg_eta	22054024	run_vs_sdca_xy	22077050	run_vs_avg_dedx
22031056	run_vs_avg_eta	22035020	run_vs_avg_eta	22054028	run_vs_sdca_xy_rms	22078016	run_vs_avg_dedx
22031057	run_vs_avg_eta	22035021	run_vs_avg_eta	22054030	run_vs_sdca_xy_rms	22078032	run_vs_avg_dedx
22031058	run_vs_avg_eta	22035022	run_vs_avg_eta	22054042	run_vs_sdca_xy run_vs_sdca_xy_rms	22081028	run_vs_sdca_xy
22032001	run_vs_avg_eta	22035025	run_vs_avg_eta	22055023	run_vs_avg_dedx	22081041	run_vs_avg_dedx
22032002	run_vs_avg_eta	22035030	run_vs_avg_eta	22056036	run_vs_avg_dedx	22084029	run_vs_avg_dedx
22032006	run_vs_avg_eta	22035031	run_vs_avg_eta	22058037	run_vs_avg_dedx	22084035	run_vs_avg_dedx
22032007	run_vs_avg_eta	22036002	run_vs_avg_eta	22059005	run_vs_avg_dedx	22085009	run_vs_sdca_xy_rms
22032008	run_vs_avg_eta	22036003	run_vs_avg_eta	22062034	run_vs_avg_eta run_vs_sdca_xy_rms	22085021	run_vs_avg_dedx
22033002	run_vs_avg_eta run_vs_avg_dedx	22036004	run_vs_avg_eta	22062035	run_vs_avg_eta run_vs_sdca_xy_rms	22088034	run_vs_avg_dedx
22033007	run_vs_avg_eta	22036005	run_vs_avg_eta	22062036	run_vs_avg_eta run_vs_sdca_xy_rms	22091018	run_vs_avg_dedx
22033008	run_vs_avg_eta	22036007	run_vs_avg_eta	22064025	run_vs_avg_eta	22093029	run_vs_avg_dedx
22033013	run_vs_avg_eta	22036008	run_vs_avg_eta	22064038	run_vs_avg_dedx	22095027	run_vs_sdca_xy_rms
22033014	run_vs_avg_eta	22036009	run_vs_avg_eta	22065014	run_vs_sdca_xy run_vs_sdca_xy_rms	22096003	run_vs_sdca_xy_rms
22033017	run_vs_avg_eta	22036010	run_vs_avg_eta	22065015	run_vs_sdca_xy_rms	22096037	run_vs_avg_dedx
22033018	run_vs_avg_eta	22036011	run_vs_avg_eta	22067039	run_vs_avg_dedx	22097016	run_vs_avg_eta
22033020	run_vs_avg_eta	22036012	run_vs_avg_eta	22068012	run_vs_avg_eta run_vs_sdca_xy	22099024	run_vs_avg_dedx
22033022	run_vs_avg_eta	22036024	run_vs_avg_eta	22068041	run_vs_sdca_xy_rms	22099042	run_vs_avg_eta
22033023	run_vs_avg_eta	22036025	run_vs_avg_eta	22069030	run_vs_sdca_xy	22100045	run_vs_avg_dedx
22033024	run_vs_avg_eta	22036026	run_vs_avg_eta	22069032	run_vs_sdca_xy	22102034	run_vs_avg_dedx
22033026	run_vs_avg_eta	22039010	run_vs_refmult	22069033	run_vs_sdca_xy	22103027	run_vs_avg_dedx
22033031	run_vs_avg_eta	22039013	run_vs_avg_phi run_vs_sdca_xy_rms	22069034	run_vs_refmult	22104027	run_vs_avg_dedx
22033032	run_vs_avg_eta	22039028	run_vs_refmult	22069040	run_vs_refmult	22105030	run_vs_avg_dedx
22033033	run_vs_avg_eta	22040038	run_vs_avg_eta	22070001	run_vs_refmult	22106032	run_vs_avg_dedx
22033034	run_vs_avg_eta	22040043	run_vs_avg_eta	22070002	run_vs_refmult	22108050	run_vs_avg_dedx
22033036	run_vs_avg_eta	22040045	run_vs_avg_eta	22070003	run_vs_refmult	22109032	run_vs_avg_phi run_vs_refmult
22033037	run_vs_avg_eta	22044004	run_vs_refmult	22070004	run_vs_refmult	22110025	run_vs_sdca_xy_rms
22033038	run_vs_avg_eta	22044005	run_vs_refmult	22070005	run_vs_refmult	22111047	run_vs_avg_dedx
22033039	run_vs_avg_eta	22047008	run_vs_avg_dedx	22070006	run_vs_refmult	22112021	run_vs_avg_dedx
22033041	run_vs_avg_eta	22048040	run_vs_avg_eta	22070007	run_vs_refmult	22113001	run_vs_avg_dedx
22033042	run_vs_avg_eta	22048042	run_vs_sdca_xy_rms	22070008	run_vs_refmult	22113029	run_vs_avg_dedx
22033043	run_vs_avg_eta	22049027	run_vs_sdca_xy_rms	22070009	run_vs_refmult	22115004	run_vs_sdca_xy_rms
22033044	run_vs_avg_eta	22049029	run_vs_sdca_xy_rms	22070010	run_vs_refmult	22115008	run_vs_avg_eta
22034001	run_vs_avg_eta	22050003	run_vs_refmult	22070011	run_vs_refmult	22115019	run_vs_sdca_xy
22034002	run_vs_avg_eta	22050040	run_vs_refmult	22070012	run_vs_refmult	22115032	run_vs_avg_dedx
22034004	run_vs_avg_eta	22050044	run_vs_refmult	22070014	run_vs_refmult	22116008	run_vs_refmult
22034006	run_vs_avg_eta	22050045	run_vs_sdca_xy_rms	22070014	run_vs_refmult	22116025	run_vs_avg_dedx
22034007	run_vs_avg_eta	22052032	run_vs_sdca_xy_rms	22070040	run_vs_sdca_xy	22116026	run_vs_avg_dedx
22034008	run_vs_avg_eta			22071036	run_vs_avg_dedx	22116026	run_vs_avg_dedx
22034009	run_vs_avg_eta	22052033	run_vs_avg_dedx run_vs_sdca_xy run_vs_sdca_xy_rms	22074009	run_vs_refmult	22116030	run_vs_avg_dedx
22034010	run_vs_avg_eta	22052035	run_vs_sdca_xy_rms	22074042	run_vs_avg_dedx	22117023	run_vs_avg_phi run_vs_sdca_xy_rms
22035002	run_vs_avg_eta run_vs_avg_dedx	22052036	run_vs_sdca_xy_rms	22076033	run_vs_avg_dedx	22118058	run_vs_sdca_xy_rms run_vs_refmult

Bad Run List (177 total)

22031042	22035003	22052018	22076034
22031043	22035009	22053022	22077050
22031045	22035016	22054007	22078016
22031053	22035017	22054023	22078032
22031055	22035019	22054024	22081028
22031056	22035020	22054028	22081041
22031057	22035021	22054030	22084029
22031058	22035022	22054042	22084035
22032001	22035025	22055023	22085009
22032002	22035030	22056036	22085021
22032006	22035031	22058037	22088034
22032007	22036002	22059005	22091018
22032008	22036003	22062034	22093029
22033002	22036004	22062035	22095027
22033007	22036005	22062036	22096003
22033008	22036007	22064025	22096037
22033013	22036008	22064038	22097016
22033014	22036009	22065014	22099024
22033017	22036010	22065015	22099042
22033018	22036011	22067039	22100045
22033020	22036012	22068012	22102034
22033022	22036024	22068041	22103027
22033023	22036025	22069030	22104027
22033024	22036026	22069032	22105030
22033026	22039010	22069033	22106032
22033031	22039013	22069034	22108050
22033032	22039028	22069040	22109032
22033033	22040038	22070001	22110025
22033034	22040043	22070002	22111047
22033036	22040045	22070003	22112021
22033037	22044004	22070004	22113001
22033038	22044005	22070005	22113029
22033039	22047008	22070006	22115004
22033041	22048040	22070007	22115008
22033042	22048042	22070008	22115019
22033043	22049027	22070009	22115032
22034001	22049029	22070010	22116008
22034002	22050003	22070011	22116025
22034004	22050040	22070012	22116026
22034006	22050044	22070014	22116030
22034007	22050045	22070040	22117023
22034008	22052032	22071036	22118058
22034009	22052033	22074009	
22034010	22052035	22074042	
22035002	22052036	22076033	

<- New Old ->

Unhighlighted run numbers are common between
new and old (87 are common)

22062036	22064025	22109032
22031049	22065014	22111047
22033010	22065015	22112021
22033014	22067039	22113001
22033029	22068012	22113029
22035002	22068041	22114030
22035029	22069030	22115004
22036028	22069032	22115008
22039010	22069033	22115019
22039013	22069034	22115032
22039028	22069040	22116007
22044003	22070040	22116008
22044004	22074009	22116025
22044005	22074042	22116026
22047008	22076033	22116030
22048040	22076034	22117023
22048042	22077050	22118058
22049026	22078016	
22049027	22078032	
22049029	22080013	
22050003	22081041	
22050006	22084029	
22050038	22084035	
22050040	22085009	
22050044	22085021	
22050045	22087027	
22052032	22088034	
22052033	22091018	
22052035	22093029	
22052036	22094019	
22052048	22095027	
22053022	22096003	
22054007	22096037	
22054022	22097016	
22054026	22099024	
22054028	22099042	
22054030	22100045	
22054042	22102034	
22055023	22103027	
22058037	22103032	
22059005	22104027	
22061012	22105030	
22061025	22106032	
22062034	22108050	
22062035		

Backup

old List

		Chenliang	Emmy
22031049	22031049	runidvsavgeta runidvsavgdcaxyrms	run_vs_avg_eta run_vs_sdca_xy_rms
22033010	marked good	#N/A	run_vs_sdca_xy_rms
22033014	marked good	#N/A	run_vs_avg_eta
22033029	marked good	runidvsavgdcaxyrms	run_vs_sdca_xy_rms
22035002	22035002	runidvsavgdedx	#N/A
22035029	22035029	runidvsavgphi	run_vs_avg_eta run_vs_sdca_xy_rms run_vs_refmult
22036028	marked good	runidvsavgdedx	run_vs_avg_dedx
22039010	22039010	runidvsavgeta runidvsrefmultgt20	run_vs_avg_eta run_vs_refmult run_vs_avg_eta run_vs_avg_phi
22039013	22039013	runidvsavgeta runidvsavgphi	run_vs_sdca_xy_rms
22039028	22039028	runidvsrefmultgt20	run_vs_refmult
22044003	22044003	runidvsavgdcaxyrms	#N/A
22044004	marked good	runidvsrefmultgt20	run_vs_refmult
22044005	marked good	runidvsrefmultgt20	run_vs_refmult
22047008	22047008	runidvsavgdedx runidvsavgdcaxy	run_vs_avg_dedx run_vs_sdca_xy
22048040	22048040	#N/A	run_vs_avg_eta
22048042	22048042	runidvsavgdcaxyrms	run_vs_sdca_xy_rms
22049026	marked good	runidvsavgdcaxyrms	#N/A
22049027	marked good	runidvsavgdcaxy	run_vs_sdca_xy
22049029	22049029	runidvsavgdcaxyrms	run_vs_sdca_xy_rms
22050003	marked good	runidvsrefmultgt20	run_vs_refmult
22050006	22050006	runidvsrefmultgt20	run_vs_avg_eta run_vs_refmult
22050038	22050038	runidvsrefmultgt20	run_vs_refmult
22050040	22050040	runidvsrefmultgt20	run_vs_refmult
22050044	22050044	runidvsrefmultgt20	run_vs_refmult
22050045	marked good	runidvsavgdcaxyrms	run_vs_sdca_xy_rms
22052032	marked good	runidvsavgdcaxyrms	run_vs_sdca_xy_rms
22052033	22052033	runidvsavgeta runidvsavgdcaxy runidvsavgdcaxyrms	run_vs_avg_dedx run_vs_sdca_xy run_vs_sdca_xy_rms
22052035	marked good	runidvsavgdcaxy runidvsavgdcaxyrms	run_vs_sdca_xy run_vs_sdca_xy_rms
22052036	22052036	runidvsavgdcaxyrms	run_vs_sdca_xy_rms

Old List

22052048	22052048	runidvsavgscaxy	run_vs_sdca_xy
22053022	marked good	runidvsavgphi	#N/A
22054007	marked good	runidvsavgscaxyrms	run_vs_sdca_xy run_vs_sdca_xy_rms
22054022	marked good	runidvsavgeta	#N/A
22054026	marked good	runidvsavgphi	run_vs_sdca_xy_rms
22054028	22054028	runidvsavgscaxyrms	run_vs_sdca_xy_rms
22054030	marked good	runidvsavgscaxyrms	run_vs_sdca_xy_rms
22054042	marked good	runidvsavgscaxy	run_vs_sdca_xy run_vs_sdca_xy_rms
22055023	marked good	runidvsavgdedx	run_vs_avg_dedx
22058037	22058037	runidvsavgdedx	run_vs_avg_dedx
22059005	22059005	runidvsavgdedx	run_vs_avg_dedx
22061012	marked good	runidvsavgscaxyrms	run_vs_sdca_xy_rms
22061025	22061025	#N/A	run_vs_avg_phi
22062034	22062034	runidvsavgeta runidvsavgscaxyrms	run_vs_avg_eta run_vs_sdca_xy_rms
22062035	22062035	runidvsavgeta runidvsavgscaxyrms	run_vs_avg_eta run_vs_sdca_xy_rms
22062036	22062036	runidvsavgeta runidvsavgscaxyrms	run_vs_avg_eta run_vs_sdca_xy_rms
22064025	22064025	runidvsavgeta	run_vs_avg_eta
22065014	22065014	runidvsavgscaxy runidvsavgscaxyrms	run_vs_sdca_xy run_vs_sdca_xy_rms
22065015	22065015	runidvsavgscaxy runidvsavgscaxyrms	run_vs_sdca_xy run_vs_sdca_xy_rms
22067039	22067039	runidvsavgdedx	run_vs_avg_dedx
22068012	22068012	runidvsavgeta runidvsavgscaxy	run_vs_avg_eta run_vs_sdca_xy
22068041	22068041	runidvsavgscaxyrms	run_vs_sdca_xy_rms
22069030	marked good	runidvsavgscaxy	run_vs_sdca_xy
22069032	marked good	runidvsavgscaxy	run_vs_sdca_xy
22069033	marked good	runidvsavgscaxy	run_vs_sdca_xy
22069034	marked good	runidvsavgscaxy runidvsrefmultgt20	run_vs_sdca_xy run_vs_refmult
22069040	22069040	runidvsrefmultgt20	run_vs_refmult
22070040	22070040	runidvsavgscaxy runidvsavgscaxyrms	#N/A
22074009	22074009	runidvsavgscaxyrms	#N/A
22074042	22074042	runidvsavgdedx	run_vs_avg_dedx

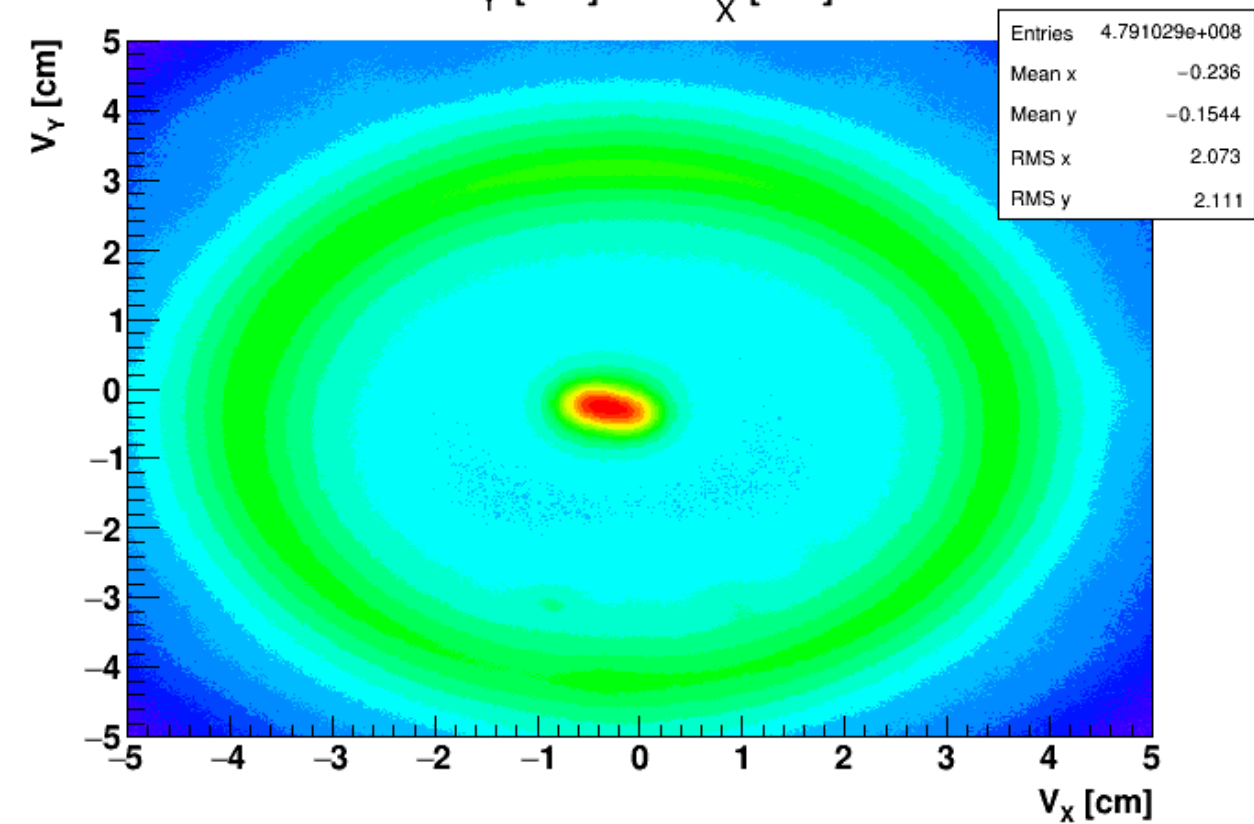
Old List

2674 total runs
 95 flagged by RbR QA
 63 still bad after
 checking runlog.

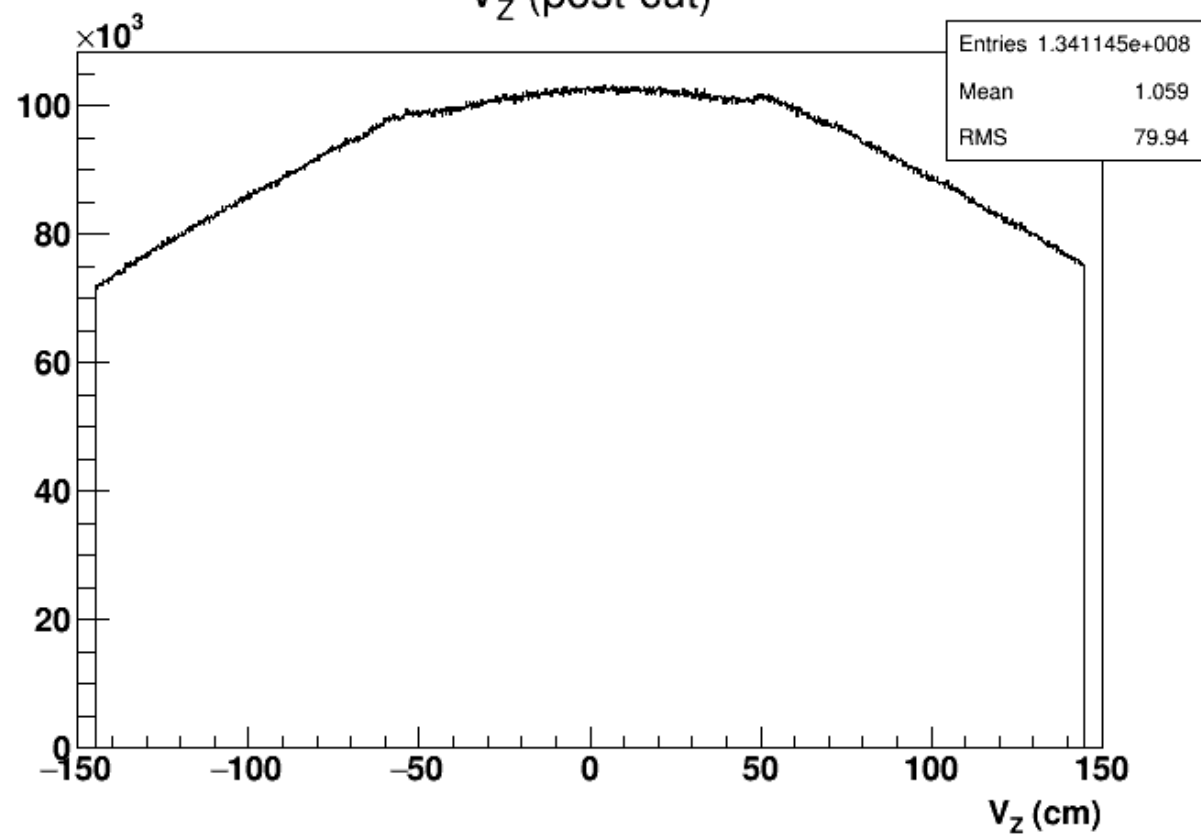
22076033	22076033	runidvsavgdedx	run_vs_avg_dedx	
22076034	22076034	runidvsavgdedx	run_vs_avg_dedx	
22077050	22077050	runidvsavgdedx	run_vs_avg_dedx	
22078016	22078016	runidvsavgdedx	run_vs_avg_dedx	
22078032	22078032	runidvsavgdedx	run_vs_avg_dedx	
22080013	marked good	runidvsavgeta		#N/A
22081041	22081041	runidvsavgdedx		#N/A
22084029	marked good	runidvsavgdedx	run_vs_avg_dedx	
22084035	marked good	runidvsavgdedx	run_vs_avg_dedx	
22085009	marked good	runidvsavgphi runidvsavgscaxyrms	run_vs_sdca_xy_rms	
22085021	22085021	runidvsavgdedx	run_vs_avg_dedx	
22087027	marked good	runidvsavgeta runidvsavgdedx	run_vs_avg_eta run_vs_avg_phi run_vs_sdca_xy_rms	
22088034	marked good	runidvsavgdedx	run_vs_avg_dedx	
22091018	marked good	runidvsavgdedx	run_vs_avg_dedx	
22093029	22093029	runidvsavgdedx	run_vs_avg_dedx	
22094019	22094019	runidvsavgeta runidvsrefmultgt20	run_vs_refmult	
22095027	marked good	runidvsavgscaxyrms	run_vs_sdca_xy_rms	
22096003	marked good	runidvsavgscaxyrms	run_vs_sdca_xy_rms	
22096037	marked good	runidvsavgdedx	run_vs_avg_dedx	
22097016	22097016	runidvsavgeta	run_vs_avg_eta	
22099024	22099024	runidvsavgdedx	run_vs_avg_dedx	
22099042	22099042	runidvsavgeta	run_vs_avg_eta	
22100045	marked good	runidvsavgdedx	run_vs_avg_dedx	
22102034	marked good	runidvsavgdedx	run_vs_avg_dedx	
22103027	marked good	runidvsavgdedx	run_vs_avg_dedx	
22103032	22103032	runidvsavgscaxyrms		#N/A
22104027	marked good	runidvsavgdedx	run_vs_avg_dedx	
22105030	marked good	runidvsavgdedx	run_vs_avg_dedx	
22106032	22106032	runidvsavgdedx	run_vs_avg_dedx	
22108050	22108050	runidvsavgdedx	run_vs_avg_dedx	
22109032	22109032	runidvsrefmultgt20 runidvsavgphi	run_vs_avg_phi run_vs_refmult	
22111047	22111047	runidvsavgdedx	run_vs_avg_dedx	
22112021	22112021	runidvsavgdedx	run_vs_avg_dedx	
22113001	22113001	runidvsavgdedx	run_vs_avg_dedx	
22113029	22113029	runidvsavgdedx	run_vs_avg_dedx	
22114030	22114030	runidvsrefmultgt20 runidvsavgphi	run_vs_avg_phi run_vs_refmult	
22115004	marked good			#N/A
22115008	22115008	runidvsavgeta runidvsavgscaxyrms	run_vs_avg_eta run_vs_sdca_xy_rms	
22115019	22115019	runidvsavgscaxy	run_vs_sdca_xy	
22115032	22115032	runidvsavgdedx	run_vs_avg_dedx	
22116007	22116007	runidvsavgdedx		#N/A
22116008	marked good	runidvsrefmultgt20	run_vs_refmult	
22116025	22116025	runidvsavgdedx	run_vs_avg_dedx	
22116026	22116026	runidvsavgdedx	run_vs_avg_dedx	
22116030	marked good	runidvsavgdedx	run_vs_avg_dedx	
22117023	marked good	runidvsavgphi runidvsavgscaxyrms	run_vs_avg_phi run_vs_sdca_xy_rms	
22118058	22118058	runidvsrefmultgt20 runidvsavgscaxyrms	run_vs_sdca_xy_rms run_vs_refmult	

Vertex

V_Y [cm] vs. V_X [cm]

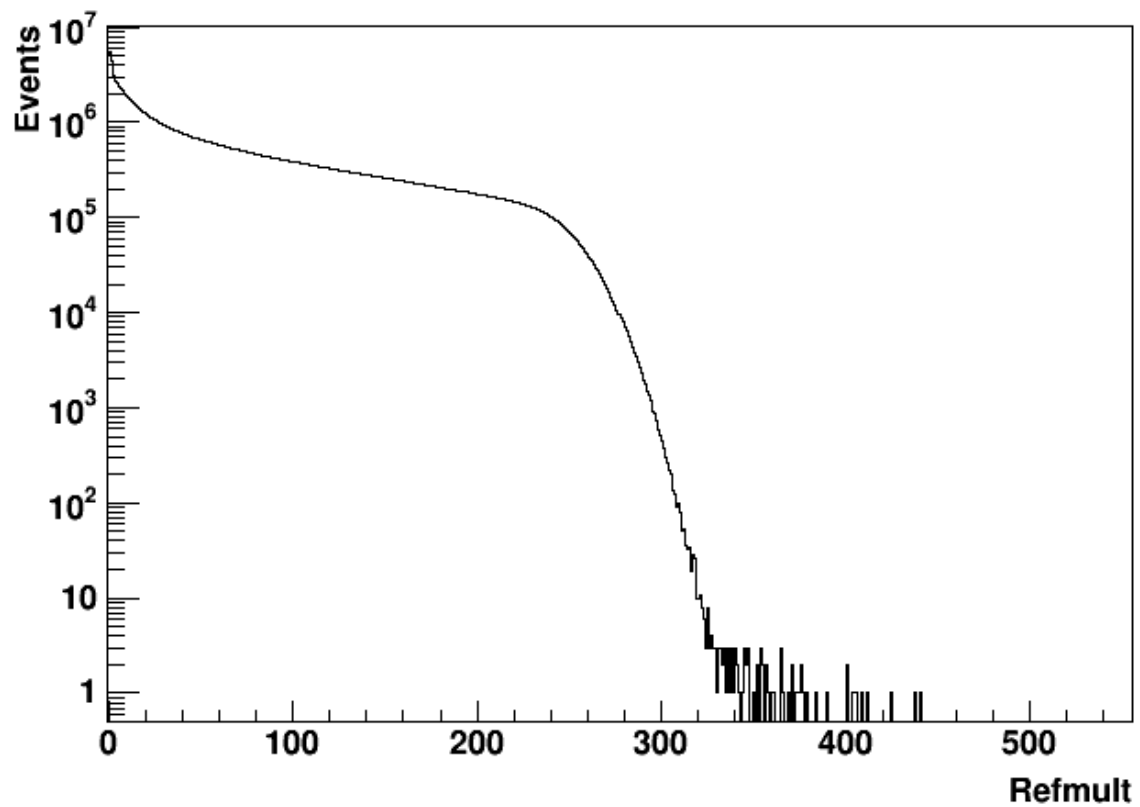


V_Z (post-cut)

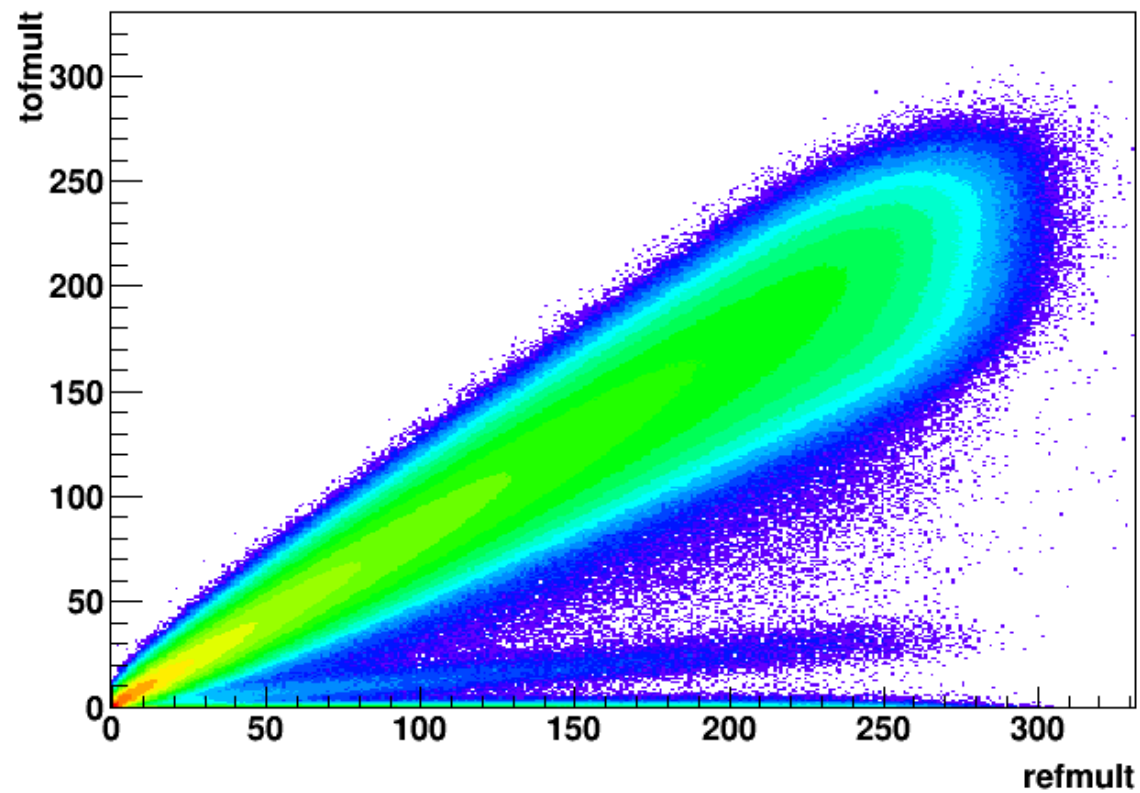


Multiplicity

Refmult

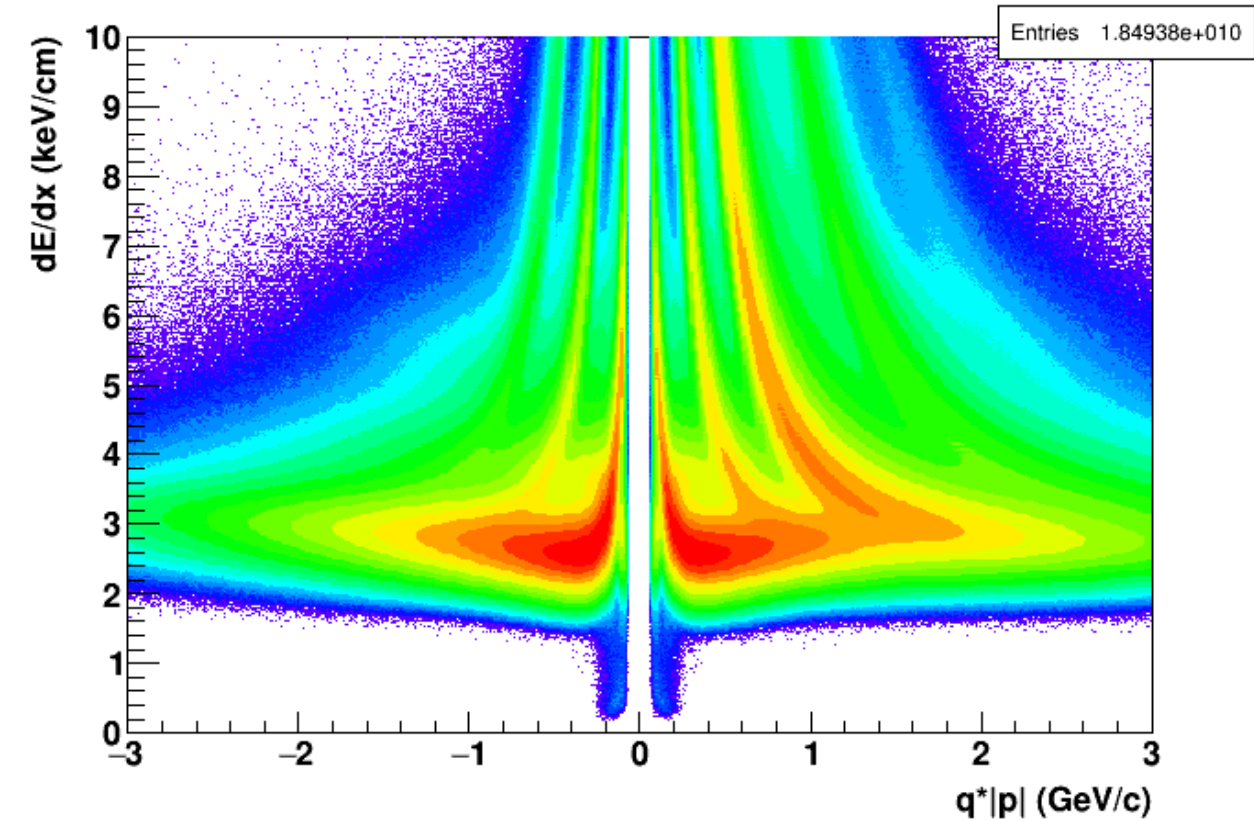


refmult vs. tofmult



PID

dE/dx vs $q^*|p|$



bTOF

