

PrimEx production, Phase III
August 27 - December 19, 2022

Beam Energy: 11.55 GeV
Beam current: $10^{-4} X_0$
Converter: 750 μm Be

Setup: hd_all.tsg_ccal_prod_fdc
Configuration: CCAL_FCAL_PS_m9 (m10)

Begin of run:

End of run:

Run duration:

Accelerator efficiency: (see table below)

Production on empty Be target (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110446	08/29	2.1	70	empty	Profiler inserted		
110447	19:40	52 M	200	Be	AC lock restored		
110448		9.7 M	200				
110449		78					
110450		70					
110451		80					
110452		75					
110453		74					
110454		39					
110455		5			raw mode		

Total 423.1

Production on empty Be target (Solenoid OFF)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110476	8/30 20:1	84	200	empty	CDC and FDC		
110477		65		Be	switched off		
110478		78					
110479		80					
110481		79					
110482		68					
Total		454					

Production on Be target, 200 nA (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110498	8/31 23:5	214	200	Be	CDC and FDC		
110499		207			switched ON		
110500		189					
110501		199					
110503		28					
110504		192					
110505		174					
110515		190					
110516		134					
110517		173					
110532		192					
110533		184					
110534		179					
110535		127					
110536		169					
110537		128					
110538		84					

110539		179					
110540		14					
110542		7					
110543		7					
110544		201					
110545		202					
110546		170					
110547		198					
110548		132					
110549		178					
110551		149					
110552		22					
110553		261					
Total		4483					

Production on Be target, 100 nA (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110554	9/3	85	100	Be	CDC and FDC		
110555	19:16	16			switched ON		
110556		89					
110557		90					
110558		86					
110559		79					
110560		31					
110561		20			junk		
110562		91					
110563		89					
110564		81					
Total		757					

Production on Be target, 50 nA (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110565	9/04	31	50				
110567	14:21	38					
110576		38					
110577		35					
110578		35					
110579		37					
110580		13					
110581		35					
110582		34					
110583		31					
Total		327					

Production on Be target, 200 nA (Ramping the Solenoid down)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110585	9/5 11:29	208	200		Start at 1330 A		
110586		217			Start at 750 A		
Total		425					

Production on Be target, 200 nA (Solenoid OFF)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110600	9/5	185	200	Be			
110601	19:17	225					
110602		232					
110602		231					
110603		249					
110605		219					
110606		219					

110607		98		tagger magnet dumped			
110608		231					
110609		191					
110610		194					
110615	17:38	225					
Total		2499					

Production on Be target, 100 nA (Solenoid OFF)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110616	9/6	103	100				
110617		111					
110618		108					
110619		101					
110620		93					
110621		36					
Total		552					

Filling He target, 200 nA (Ramping Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110637	09/07	11	200				
110638	21:25	30					
110639		92					
110640	9/8 1am	109					
Total		242					

Production on He target, 200 nA (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110641	9/8	151	200	LHe			
110642		152					
110643		158					
110644		65					
110657		153			Added low-threshold FCAL trigger		
110672		303					
110675		306			Masked 2 Noisy FCAL channels		
110676		287					
110677		314					
110678	9/9	333					
110679		336					
110680		264					
110682		233					
110683		307					
110684		347					
110685		337					
110686		69					
110687		383					
110688		45					
110689		337					
110690		208					
110691		362					
110692		344					
110693	9/10	315					
110694		336					
110695		314					
110696		348					
110697		336					
110698		348					
110699		347					
110700		161					
110702		301					
110703		339					

110704		331					
110705	9/11	301					
110706		238					
110707		278					
110708		315					
110709		185					
110710		149					
110711		282					
110713		302					
110714		235					
110715		170					
110716		331					
110718		301					
110719		189					
110724	9/12	259					
110725		253					

Total 13058

Production on empty He target, 200 nA (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110737	9/12	114	200	Empty			
110738	21:50	130					
110739		122					
110740		129					
110741		64					
110743		119					
110744		127					
110745		125					
110746		127					
110747		48					
110749		69					

110750		58					
110751		124					
110752		119					
110753		130					
110754		121					
110755		105					
Total		1831					

Production on He target, 200 nA (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110771	9/14	299	200	He			
110772	22:08	305					
110773		308					
110774		321					
110775		331					
110776		274					
110782		168					
110783		274					
110784		281					
110785		50					
110786		343					
110787		274					
110788		328					
110789		319					
110790		289					
110791		200					
110792		251					
110793		321					
110794		67					
110795		287					
110796		241					

110798		228					
110799		27					
110800		340					
110801		344					
110802		200					
110803		307					
110804		252					
110805		227					
110806		245					
110807		93					
110808		254					
110809		310					
110810		194					
110811		223					
110812		198					
110814		145					
110815		332					
110816		15					
110817		26					
110818		296			HL coda		
110819		19					
110820		202					
110821		290					
110822		290					
110824		270					
110825		166					

Total 11024

Production on empty He target, 200 nA (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110828	9/19	110	200				

110829	9:50	94					
110830		49					
110831		5			beam mostly off		
110833		19					
110834		26					
110835		5					
110836		91					
110837		40					

Total 439

Production on He target, 200 nA (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110841		39	200				
110842		112					
110843		189					
110844		185					
110845		210					
110846		138					
110847		191					
110848		126					
110849		185					
110850		254					
110851		70					
110852		268					
110853		231					
110854		218					
110855		197					
110856		204					
110857		242					
110858		215					
110859		204					

110860		222					
110861		86					
110862		3					
110863		32					
110864		270					
110865		220					
110866		174					
110867		85					
110868		67					
110869		91					
110870		17					
110871		195					
110872		307					
110873		297					
110874		228					
110875		158					
110876		136					
110877		222					
110878		123					
110879		301					
110881		239					
110882	9/23	35					
110896	9/25	232					
110897		209					
110899		7					
110900		56					
110901		97					
110902		38					
110903		64					
110904		110					
110905		24					

Total 7823

Production on empty He target, 200 nA (Solenoid ON)

Run	Date	Events (M)	Current	Target	Comments	Files	PS pairs
110907	9/35	55					
110909		66					
110910		66					
110911		27					
110912		108					
110913		92					
110914		33					
110915		11					
110916		20					
110917		108					
110918		108					
110919		82					
110920		13					
Total		789					

Summary 2019 / 2021 / 2022

Conditions	He						Be					
	Target			Empty			Target			Empty		
	2019	2021	2022	2019	2021	2022	2019	2021	2022	2019	2021	2022
200 nA	39991	2045		3288	250		2789	2550	4483	643	236	454
		2527							2499			423
100 nA	549	665			60			695	757		74	
									552			
50 nA	430							622	327		47	

