Synclite Devices

Category	Antiprotons	Protons	# data elements	Units	Logged?	Where?	Description
Voltages							
	T:SLA01V	T:SLP01V	1	Volt	Inst3	Event	MCP Voltage
	T:SLA10V	T:SLP10V	1	Volt	Inst3	Event	Phosphor Screen Voltage
	T:SLAMVL	T:SLPMVL	1	Volt			MCP Voltage Limit
	T:SLAMCL	T:SLPMCL	1	amp			MCP Current Limit
	T:SLAPVL	T:SLPPVL	1	Volt			Phosphor Screen Voltage Limit
	T:SLAPCL	T:SLPPCL	1	amp			Phosphor Screen Current Limit
Optical							
	T:SLADI	T:SLPDI	1	cm	Inst3	1 min	Distance from lens to Image
	T:SLADO	T:SLPDO	1	cm	Inst3	1 min	Distance from lens to Object
	T:SLAHPX	T:SLPHPX	1	-6m	Inst3	1 min	Horizontal Pixel Size
	T:SLAVPX	T:SLPVPX	1	-6m	Inst3	1 min	Vertical Pixel Size
	T:SLAHDI	T:SLPHDI	1	mm	Inst3	1 min	Horizontal Diffraction plus other effects
	T:SLAVDI	T:SLPVDI	1	mm	Inst3	1 min	Vertical Diffraction plus other effects
	T:SLAHSC	T:SLPHSC	30	NONE	Inst3	1 min	ASCII String specifying correction to horizontal sigma as function of Intensity
	T:SLAVSC	T:SLPVSC	30	NONE	Inst3	1 min	ASCII String specifying correction to vertical sigma as function of Intensity
DAQ							
	T:SLAGPO	T:SLPGPO	40	bkts	Inst3	Event	Gate Position
	T:SLAGWI	T:SLPGWI	40	bkts	Inst3	Event	Gate Width
	T:SLAFRA	T:SLPFRA	40	none	Inst3	Event	Frames per Sample
	T:SLATRG	T:SLPTRG	40	none	Inst3	Event	Trigger every Nth turn
	T:SLAOFF	T:SLPOFF	1	bkts			Global offset of Gate Position
	T:SLASAM	T:SLPSAM	40	NONE	Inst3	Event	Which bunches to sample
	T:SLHVIB		2	NONE			Beam Current threshold for turning on HV
	T:SLHVTE		2	NONE			TeV Energy threshold for turning on HV
	T:SLSAIB		2	NONE			Beam Current threshold for starting DAQ
	T:SLSATE		2	NONE			TeV Energy threshold for starting DAQ
	T:SLRAW		1	NONE			Running average weighting factor for new point
Lattice							
	T:SLAHBE	T:SLPHBE	1	NONE	Inst3	1 min	Horizontal Beta
	T:SLAVBE	T:SLPVBE	1	NONE	Inst3	1 min	Vertical Beta
	T:SLAHD	T:SLPHD	1	NONE	Inst3	1 min	Horizontal Dispersion
Measurements							
Instantaneous							
	T:SLAMAX	T:SLPMAX	40	NONE	Inst3	Event	Maximum pixel value
		T:SLPAG1	1	E9	Inst3	Event	Abort Gap 1 Intensity
		T:SLPAG2	1	E9	Inst3	Event	Abort Gap 2 Intensity
		T:SLPAG3	1	E9	Inst3	Event	Abort Gap 3 Intensity
Horizontal							
	T:SLAAH	T:SLPAH	40	E9	Inst3	Event	Intensity (Fit amplitude * sigma * sqrt(2pi))
	T:SLASH	T:SLPSH	40	mm	Inst3	Event	Sigma
	T:SLACH	T:SLPCH	40	mm	Inst3	Event	Centroid
	T:SLAEX	T:SLPEX	40	NONE	Inst3	Event	Emitttance
	T:SLAFH	T:SLPFH	40	NONE	Inst3	Event	Chi squared of fit
	T:SLABH	T:SLPBH	40	E9	Inst3	Event	Background intercept
	T:SLAMH	T:SLPMH	40	NONE	Inst3	Event	Background slope
	T:SLAHSU	T:SLPHSU	40	NONE	Inst3	Event	Summed Intensity (no fit)
Vertical							
	T:SLAAV	T:SLPAV	40	E9	Inst3	Event	Intensity (Fit amplitude * sigma * sqrt(2pi))
	T:SLASV	T:SLPSV	40	mm	Inst3	Event	Sigma
	T:SLACV	T:SLPCV	40	mm	Inst3	Event	Centroid
	T:SLAEY	T:SLPEY	40	NONE	Inst3	Event	Emittance
	T:SLAFV	T:SLPFV	40	NONE	Inst3	Event	Chi squared of fit
	T:SLABV	T:SLPBV	40	E9	Inst3	Event	Background intercept
	T:SLAMV	T:SLPMV	40	NONE	Inst3	Event	Background slope
	T:SLAVSU	T:SLPVSU	40	NONE	Inst3	Event	Summed Intensity (no fit)
Running Average							
Horizontal							
	T:SLAARH	T:SLPARH	40	E9	Inst3	Event	Intensity (Fit amplitude * sigma * sqrt(2pi))
	T:SLASRH	T:SLPSRH	40	mm	Inst3	Event	Sigma
	T:SLACRH	T:SLPCRH	40	mm	Inst3	Event	Centroid
	T:SLAERX	T:SLPERX	40	NONE			Emittance
	T:SLAFRH	T:SLPFRH	40	NONE			Chi squared of fit
	T:SLABRH	T:SLPBRH	40	E9			Background intercept
	T:SLAMRH	T:SLPMRH	40	NONE			Background slope
Vertical							
	T:SLAARV	T:SLPARV	40	E9	Inst3	Event	Intensity (Fit amplitude * sigma * sqrt(2pi))
	T:SLASRV	T:SLPSRV	40	mm	Inst3	Event	Sigma
	T:SLACRV	T:SLPCRV	40	mm	Inst3	Event	Centroid
	T:SLAERY	T:SLPERY	40	NONE			Emittance
	T:SLAFRV	T:SLPFRV	40	NONE			Chi squared of fit
	T:SLABRV	T:SLPBRV	40	E9			Background intercept
	T:SLAMRV	T:SLPMRV	40	NONE			Background slope
Acnet Scalings							
Horizontal							
Scale							
	T:SLAHIS	T:SLPHIS	1	NONE	Inst3	1 min	Intensity
	T:SLAHSS	T:SLPHSS	1	NONE			Sigma
	T:SLAHCS	T:SLPHCS	1	NONE			Centroid
	T:SLAHES	T:SLPHES	1	NONE			Emittance
	T:SLAHFS	T:SLPHFS	1	NONE			Chi squared of fit
	T:SLAHBS	T:SLPHBS	1	NONE			Background intercept
	T:SLAHMS	T:SLPHMS	1	NONE			Background slope
Offset							
	T:SLAHIO	T:SLPHIO	1	NONE			Intensity
	T:SLAHSO	T:SLPHSO	1	NONE			Sigma
	T:SLAHCO	T:SLPHCO	1	NONE			Centroid
	T:SLAHEO	T:SLPHEO	1	NONE			Emittance
	T:SLAHFO	T:SLPHFO	1	NONE			Chi squared of fit
	T:SLAHBO	T:SLPHBO	1	NONE			Background intercept
	T:SLAHMO	T:SLPHMO	1	NONE			Background slope

Synclite Devices

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Vertical Scale							
	T:SLAVIS	T:SLPVIS	1	NONE	Inst3	1 min	Intensity
	T:SLAVSS	T:SLPVSS	1	NONE			Sigma
	T:SLAVCS	T:SLPVCS	1	NONE			Centroid
	T:SLAVES	T:SLPVES	1	NONE			Emittance
	T:SLAVFS	T:SLPVFS	1	NONE			Chi squared of fit
	T:SLAVBS	T:SLPVBS	1	NONE			Background intercept
	T:SLAVMS	T:SLPVMS	1	NONE			Background slope
Offset							
	T:SLAVIO	T:SLPVIO	1	NONE			Intensity
	T:SLAVSO	T:SLPVSO	1	NONE			Sigma
	T:SLAVCO	T:SLPVCO	1	NONE			Centroid
	T:SLAVEO	T:SLPVEO	1	NONE			Emittance
	T:SLAVFO	T:SLPVFO	1	NONE			Chi squared of fit
	T:SLAVBO	T:SLPVBO	1	NONE			Background intercept
	T:SLAVMO	T:SLPVMO	1	NONE			Background slope
Miscellaneous							
	T:SLCMD		1	NONE			SL Command Register
	T:SLHRT		1	NONE			Heart beat device to detect failure of Synclite
	T:SLSAVE		1	NONE			Setting this device saves the next image to file
	T:SLSPEC		1	NONE			Which specifications file is in use
	T:SLAGID		1	NONE			Done from AGI
	T:SLTCP		1	NONE	Inst3	1 min	TCport failure
SyncliteViewer Communications							
	T:SLIMAG			NONE			Image data from front end (overloaded offset use)
	T:SLITTL			NONE			Titles for images (one title for each thumbnail)
	T:SLITMB			NONE			Thumbnail images
	T:SLITST			NONE			Timestamps for images
	T:SLVRAW		230	NONE			Vertical Profile data
	T:SLVFIT		230	NONE			Vertical Profile fit
	T:SLHRAW		230	NONE			Horizontal Profile data
	T:SLHFIT		230	NONE			Horizontal Profile fit