"Transverse" Data in SDA

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original 6/30/03
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Data included here are BPMs, SEMs, BLTs, FWs, CPMs, Synch Lite, Schottky monitors, dipole correctors, dampers, collimators, and CDF SVT. BPM data only accessible through T39. Only sigmas, emittances, and freshness variable are listed for Tev FWs. (Goodness of fit, centroid, or amplitude parameters are read by SDA but not listed in this table.) All BLT data still in confused state. MI BPM data is not yet getting into SDA correctly.

Proton Data

Meaning	Bytes	Name	Case
MI BPM parameter (?)	1	I:11BPNP	Proton Injection Tuneup
MI BPM mode	4	I:BP0MOD	Proton Injection Tuneup
MI ringwide Flash	368	I:WNBLF2	Proton Injection Tuneup
MI ringwide Flash	368	I:WNBLFL	Proton Injection Tuneup
MI ringwide Flash	690	I:WNFLS2	Proton Injection Tuneup
MI ringwide Flash	690	I:WNFLSH	Proton Injection Tuneup
P1 line Flash	408	I:BP7{FLB,MOD}	Proton Injection Tuneup
A0 BPM Display orbit (uncoalesced protons @ 150 GeV with injection bump)	20	T:A0BPDF	Proton Injection Tuneup
A1 house parameters	64	T:A1BPNP	Proton Injection Tuneup
B0 BPM Display orbit	20	T:B0BPDF	Proton Injection Tuneup
B0 BLM Display orbit	16	T:B0BPLD	Proton Injection Tuneup
D0 BPM Display orbit	20	T:D0BPDF	Proton Injection Tuneup
D0 BLM Display orbit	16	T:D0BPLD	Proton Injection Tuneup
BA BPM Display orbit	20	T:BABPDF	Proton Injection Tuneup
BA BLM Display orbit	16	T:BABPLD	Proton Injection Tuneup
DA BLM Display orbit	16	T:DABPLD	Proton Injection Tuneup
Ringwide BPM Display orbit	480	T:WNBPDF	Proton Injection Tuneup
Ringwide BLM Display orbit	384	T:WNBPLD	Proton Injection Tuneup
P1 H trim used for beamline tuning	2	I:HT710	Proton Injection Tuneup
P1 H trim used for beamline tuning	2	I:HT712	Proton Injection Tuneup
P1 V trim used for beamline tuning	2	I:VT709	Proton Injection Tuneup
F0 Lambertson used for beamline tuning	2	T:ILAM	Proton Injection Tuneup
A1 line Flash	408	I:BP9{FLB,MOD}	Eject Protons
MI BPM mode	4	I:BP0MOD	Eject Protons
MI 1st turn Flash	690	I:WNFLS2	Eject Protons
MI last turn Flash	690	I:WNFLSH	Eject Protons
A1 H trim used for beamline tuning	2	I :HT902	Eject Protons
A1 H trim used for beamline tuning	2	I:HT904	Eject Protons
A1 V trim used for beamline tuning	2	I:VT901	Eject Protons
A1 V trim used for beamline tuning	2	I:VT903	Eject Protons
A0 BPM Snapshot orbit (uncoalesced protons @ 150 GeV on central orbit)	20	T:A0BPSN	Proton Injection Porch
A1 house parameters	64	T:A1BPNP	Proton Injection Porch
B0 BPM Snapshot orbit	20	T:B0BPSN	Proton Injection Porch
B0 BLM Snapshot orbit	16	T:B0BLSN	Proton Injection Porch
D0 BPM Snapshot orbit	20	T:D0BPSN	Proton Injection Porch
D0 BLM Snapshot orbit	16	T:D0BLSN	Proton Injection Porch
BA BPM Snapshot orbit	20	T:BABPSN	Proton Injection Porch
BA BLM Snapshot orbit	16	T:BABPLD	Proton Injection Porch

DA BLM Snapshot orbit	16	T:DABLSN	Proton Injection Porch
Ringwide BPM Snapshot orbit	480	T:WNBPSN	Proton Injection Porch
Ringwide BLM Snapshot orbit	384	T:WNBLSN	Proton Injection Porch
MI FW pass 1 H sigma @ 8 GeV	16	I:WHSP02[72]	Inject Protons: B. to MI
MI FW pass 2 H sigma @ 8 GeV	16	I:WHSP04[108]	Inject Protons: B. to MI
MI FW pass 1 H emittance @ 8 GeV	16	I:WHEP02[144]	Inject Protons: B. to MI
MI FW pass 2 H emittance @ 8 GeV	16	I:WHEP04[216]	Inject Protons: B. to MI
MI FW pass 1 V sigma @ 8 GeV	16	I:WVSP02[72]	Inject Protons: B. to MI
MI FW pass 2 V sigma @ 8 GeV	16	I:WVSP04[108]	Inject Protons: B. to MI
MI FW pass 1 V emittance @ 8 GeV	16	I:WVEP02[144]	Inject Protons: B. to MI
MI FW pass 2 V emittance @ 8 GeV	16	I:WVEP04[216]	Inject Protons: B. to MI
MI FW pass 1 H sigma @ 150 GeV	16	I:WHSP03[145]	Inject Protons
MI FW pass 2 H sigma @ 150 GeV	16	I:WHSP05[181]	Inject Protons
MI FW pass 1 H emittance @ 150 GeV	16	I:WHEP03[289]	Inject Protons
MI FW pass 2 H emittance @ 150 GeV	16	I:WHEP05[361]	Inject Protons
MI FW pass 1 V sigma @ 150 GeV	16	I:WVSP03[145]	Inject Protons
MI FW pass 2 V sigma @ 150 GeV	16	I:WVSP05[181]	Inject Protons
MI FW pass 1 V emittance @ 150 GeV	16	I:WVEP03[289]	Inject Protons
MI FW pass 2 V emittance @ 150 GeV	16	I:WVEP05[361]	Inject Protons
Tev horizontal damper status @ $4D	2	T:DHAMP	Inject Protons
Tev horizontal damper gain @ $4D	2	T:DMPHG	Inject Protons
Tev vertical damper status @ $4D	2	T:DVAMP	Inject Protons
Tev vertical damper gain @ $4D	2	T:DMPVG	Inject Protons
Tev FW freshness # (pass1, pass2) @ inj.	8	T:FWFRSH[0-1]	Inject protons
Tev FW E11 H sigma (pass1, pass2) @ inj.	288	T:FWEPSG[0-71]	Inject Protons
Tev FW E17 H sigma (pass1, pass2) @ inj.	288	T:FWHPSG[0-71]	Inject Protons
Tev FW E11 V sigma (pass1, pass2) @ inj.	288	T:FWVPSG[0-71]	Inject Protons
Tev FW dp/p @ inj.	144	T:WEEP00[0-35]	Inject Protons
Tev FW H emit. @ inj.	144	T:WHEP00[0-35]	Inject Protons
Tev FW V emit. @ inj.	144	T:WVEP00[0-35]	Inject Protons
Tev horizontal damper status before open helix	2	T:DHAMP	Pbar Injection Porch
Tev horizontal damper gain before open helix	2	T:DMPHG	Pbar Injection Porch
Tev vertical damper status before open helix	2	T:DVAMP	Pbar Injection Porch
Tev vertical damper gain before open helix	2	T:DMPVG	Pbar Injection Porch
Tev FW freshness # (pass1, pass2) after open helix	8	T:FWFRSH[0-1]	Pbar Injection Porch
Tev FW E11 H sigma (pass1, pass2) after open helix	288	T:FWEPSG[0-71]	Pbar Injection Porch
Tev FW E17 H sigma (pass1, pass2) after open helix	288	T:FWHPSG[0-71]	Pbar Injection Porch
Tev FW E11 V sigma (pass1, pass2) after open helix	288	T:FWVPSG[0-71]	Pbar Injection Porch
Tev FW dp/p after open helix	144	T:WEEP00[0-35]	Pbar Injection Porch
Tev FW H emit. after open helix	144	T:WHEP00[0-35]	Pbar Injection Porch
Tev FW V emit. after open helix	144	T:WVEP00[0-35]	Pbar Injection Porch
Tev H BLT amplitude (mm)	144	T:BLTHAM[0-35]	Pbar Injection Porch
Tev H BLT phase (units?)	144	T:BLTHPH[0-35]	Pbar Injection Porch
Tev H BLT tune	144	T:BLTHTU[0-35]	Pbar Injection Porch
Tev V BLT amplitude (mm)	144	T:BLTVAM[0-35]	Pbar Injection Porch
Tev V BLT phase (units?)	144	T:BLTVPH[0-35]	Pbar Injection Porch
Tev V BLT tune	144	T:BLTVTU[0-35]	Pbar Injection Porch
A0 BPM Snapshot orbit (36 coalesced proton bunches on central orbit)	20	T:A0BPSN	Pbar Injection Porch
A1 house parameters	64	T:A1BPNP	Pbar Injection Porch
B0 BPM Snapshot orbit	20	T:B0BPSN	Pbar Injection Porch

B0 BLM Snapshot orbit	16	T:B0BLSN	Pbar Injection Porch
D0 BPM Snapshot orbit	20	T:D0BPSN	Pbar Injection Porch
D0 BLM Snapshot orbit	16	T:D0BLSN	Pbar Injection Porch
BA BPM Snapshot orbit	20	T:BABPSN	Pbar Injection Porch
BA BLM Snapshot orbit	16	T:BABPLD	Pbar Injection Porch
DA BLM Snapshot orbit	16	T:DABLSN	Pbar Injection Porch
Ringwide BPM Snapshot orbit	480	T:WNBPSN	Pbar Injection Porch
Ringwide BLM Snapshot orbit	384	T:WNBLSN	Pbar Injection Porch
Tev horizontal damper status before pbar inj.	2	T:DHAMP	Inject Pbars
Tev horizontal damper gain before pbar inj.	2	T:DMPHG	Inject Pbars
Tev vertical damper status before pbar inj.	2	T:DVAMP	Inject Pbars
Tev vertical damper gain before pbar inj.	2	T :DMPVG	Inject Pbars
Tev FW freshness # (pass1, pass2) @ pbar inj.	8	T:FWFRSH[0-1]	Inject Pbars
Tev FW E11 H sigma (pass1, pass2) @ pbar inj.	288	T:FWEPSG[0-71]	Inject Pbars
Tev FW E17 H sigma (pass1, pass2) @ pbar inj.	288	T:FWHPSG[0-71]	Inject Pbars
Tev FW E11 V sigma (pass1, pass2) @ pbar inj.	288	T:FWVPSG[0-71]	Inject Pbars
Tev FW dp/p @ pbar inj.	144	T:WEEP00[0-35]	Inject Pbars
Tev FW H emit. @ pbar inj.	144	T:WHEP00[0-35]	Inject Pbars
Tev FW V emit. @ pbar inj.	144	T:WVEP00[0-35]	Inject Pbars
A0 BPM Snapshot orbit (~33 sec before each pbar injection)	20	T:A0BPSN	Inject Pbars
A1 house parameters	64	T:A1BPNP	Inject Pbars
B0 BPM Snapshot orbit	20	T:B0BPSN	Inject Pbars
B0 BLM Snapshot orbit	16	T:B0BLSN	Inject Pbars
D0 BPM Snapshot orbit	20	T:D0BPSN	Inject Pbars
D0 BLM Snapshot orbit	16	T:D0BLSN	Inject Pbars
BA BPM Snapshot orbit	20	T:BABPSN	Inject Pbars
BA BLM Snapshot orbit	16	T:BABPLD	Inject Pbars
DA BLM Snapshot orbit	16	T:DABLSN	Inject Pbars
Ringwide BPM Snapshot orbit	480	T:WNBPSN	Inject Pbars
Ringwide BLM Snapshot orbit	384	T:WNBLSN	Inject Pbars
Tev horizontal damper status before ramp	2	T:DHAMP	Before Ramp
Tev horizontal damper gain before ramp	2	T:DMPHG	Before Ramp
Tev vertical damper status before ramp	2	T:DVAMP	Before Ramp
Tev vertical damper gain before ramp	2	T:DMPVG	Before Ramp
All 222 Tevatron dipole trim readbacks	444	T:xxxx; C:xxxx	Before Ramp
Tev horizontal damper status just before ramp	2	T:DHAMP	Acceleration
Tev horizontal damper gain just before ramp	2	T:DMPHG	Acceleration
Tev vertical damper status just before ramp	2	T:DVAMP	Acceleration
Tev vertical damper gain just before ramp	2	T:DMPVG	Acceleration
Tev FW freshness # (pass1, pass2) @ 190 GeV	8	T:FWFRSH[0-1]	Acceleration
Tev FW E11 H sigma (pass1, pass2) @ 190 GeV	288	T:FWEPSG[0-71]	Acceleration
Tev FW E17 H sigma (pass1, pass2) @ 190 GeV	288	T:FWHPSG[0-71]	Acceleration
Tev FW E11 V sigma (pass1, pass2) @ 190 GeV	288	T:FWVPSG[0-71]	Acceleration
Tev FW dp/p @ 190 GeV	144	T:WEEP00[0-35]	Acceleration
Tev FW H emit. @ 190 GeV	144	T:WHEP00[0-35]	Acceleration
Tev FW V emit. @ 190 GeV	144	T:WVEP00[0-35]	Acceleration
Tev horizontal damper status @ flattop	2	T:DHAMP	Flattop
Tev horizontal damper gain @ flattop	2	T:DMPHG	Flattop
Tev vertical damper status @ flattop	2	T:DVAMP	Flattop
Tev vertical damper gain @ flattop	2	T:DMPVG	Flattop
Tev FW freshness # (pass1, pass2) @ flattop	8	T:FWFRSH[0-1]	Flattop
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEPSG[0-71]	Flattop
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHPSG[0-71]	Flattop
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVPSG[0-71]	Flattop

Tev FW dp/p @ flattop	144	T:WEEP00[0-35]	Flattop
Tev FW H emit. @ flattop	144	T:WHEP00[0-35]	Flattop
Tev FW V emit. @ flattop	144	T:WVEP00[0-35]	Flattop
All 222 Tev dipole trims	444	T:xxxx; C:xxxx	Flattop
10 Profiles on ramp (150,200,300,400,500,600,700,800,900,980 GeV)	10312	T:xxxx	Flattop
Tev horizontal damper status @ flattop	2	T:DHAMP	Squeeze
Tev horizontal damper gain @ flattop	2	T:DMPHG	Squeeze
Tev vertical damper status @ flattop	2	T:DVAMP	Squeeze
Tev vertical damper gain @ flattop	2	T :DMPVG	Squeeze
Tev FW freshness # (pass1, pass2) @ flattop	8	T:FWFRSH[0-1]	Squeeze
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEPSG[0-71]	Squeeze
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHPSG[0-71]	Squeeze
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVPSG[0-71]	Squeeze
Tev FW dp/p @ flattop	144	T:WEEP00[0-35]	Squeeze
Tev FW H emit. @ flattop	144	T:WHEP00[0-35]	Squeeze
Tev FW V emit. @ flattop	144	T:WVEP00[0-35]	Squeeze
All 222 Tev dipole trims	444	T:xxxx; C:xxxx	Squeeze
25 Profiles on squeeze (LBSEQ=1,2,….25)	25432	T:xxxx	Squeeze
Sync Lite amplitude	2 x 144	T:SLPA{H,V}[0-35]	Squeeze
Sync Lite background	2 x 144	T:SLPB{H,V}[0-35]	Squeeze
Sync Lite centroid	2 x 144	T:SLPC{H,V}[0-35]	Squeeze
Sync Lite chi	2 x 144	T:SLPF{H,V}[0-35]	Squeeze
Sync Lite scale factor	2 x 4	T:SLP{H,V}S	Squeeze
Sync Lite background slope	2 x 144	T:SLPM{H,V}[0-35]	Squeeze
Sync Lite emittance	2 x 144	T:SLPE{X,Y}[0-35]	Squeeze
Sync Lite sigma	2 x 144	T:SLPS{H,V}[0-35]	Squeeze
A0 BPM Snapshot orbit (after collisions are initiated at B0 and D0)	20	T:A0BPSN	Initiate Collisions
A1 house parameters	64	T:A1BPNP	Initiate Collisions
B0 BPM Snapshot orbit	20	T:B0BPSN	Initiate Collisions
B0 BLM Snapshot orbit	16	T:B0BLSN	Initiate Collisions
D0 BPM Snapshot orbit	20	T:D0BPSN	Initiate Collisions
D0 BLM Snapshot orbit	16	T:D0BLSN	Initiate Collisions
BA BPM Snapshot orbit	20	T:BABPSN	Initiate Collisions
BA BLM Snapshot orbit	16	T:BABPLD	Initiate Collisions
DA BLM Snapshot orbit	16	T:DABLSN	Initiate Collisions
Ringwide BPM Snapshot orbit	480	T:WNBPSN	Initiate Collisions
Ringwide BLM Snapshot orbit	384	T:WNBLSN	Initiate Collisions
Tev horizontal damper status @ flattop	2	T:DHAMP	Initiate Collisions
Tev horizontal damper gain @ flattop	2	T :DMPHG	Initiate Collisions
Tev vertical damper status @ flattop	2	T:DVAMP	Initiate Collisions
Tev vertical damper gain @ flattop	2	T:DMPVG	Initiate Collisions
Tev FW freshness # (pass1, pass2) @ flattop	8	T:FWFRSH[0-1]	Initiate Collisions
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEPSG[0-71]	Initiate Collisions
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHPSG[0-71]	Initiate Collisions
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVPSG[0-71]	Initiate Collisions
Tev FW dp/p @ flattop	144	T:WEEP00[0-35]	Initiate Collisions
Tev FW H emit. @ flattop	144	T:WHEP00[0-35]	Initiate Collisions
Tev FW V emit. @ flattop	144	T:WVEP00[0-35]	Initiate Collisions
Sync Lite amplitude	2 x 144	T:SLPA{H,V}[0-35]	Initiate Collisions
Sync Lite background	2 x 144	T:SLPB{H,V}[0-35]	Initiate Collisions
Sync Lite centroid	2 x 144	T:SLPC{H,V}[0-35]	Initiate Collisions
Sync Lite chi	2 x 144	T:SLPF{H,V}[0-35]	Initiate Collisions
Sync Lite scale factor	2 x 4	T:SLP{H,V}S	Initiate Collisions

Sync Lite background slope	2 x 144	T:SLPM{H,V}[0-35]	Initiate Collisions
Sync Lite emittance	2 x 144	T:SLPE{X,Y}[0-35]	Initiate Collisions
Sync Lite sigma	2 x 144	T:SLPS{H,V}[0-35]	Initiate Collisions
All 222 Tev dipole trims	444	T:xxxx; C:xxxx	Remove Halo
Tev horizontal damper status @ flattop	2	T:DHAMP	Remove Halo
Tev horizontal damper gain @ flattop	2	T:DMPHG	Remove Halo
Tev vertical damper status @ flattop	2	T:DVAMP	Remove Halo
Tev vertical damper gain @ flattop	2	T:DMPVG	Remove Halo
Tev FW freshness # (pass1, pass2) @ flattop	8	T:FWFRSH[0-1]	Remove Halo
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEPSG[0-71]	Remove Halo
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHPSG[0-71]	Remove Halo
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVPSG[0-71]	Remove Halo
Tev FW dp/p @ flattop	144	T:WEEP00[0-35]	Remove Halo
Tev FW H emit. @ flattop	144	T:WHEP00[0-35]	Remove Halo
Tev FW V emit. @ flattop	144	T:WVEP00[0-35]	Remove Halo
Sync Lite amplitude	2 x 144	T:SLPA{H,V}[0-35]	Remove Halo
Sync Lite background	2 x 144	T:SLPB{H,V}[0-35]	Remove Halo
Sync Lite centroid	2 x 144	T:SLPC{H,V}[0-35]	Remove Halo
Sync Lite chi	2 x 144	T:SLPF{H,V}[0-35]	Remove Halo
Sync Lite scale factor	2 x 4	T:SLP{H,V}S	Remove Halo
Sync Lite background slope	2 x 144	T:SLPM{H,V}[0-35]	Remove Halo
Sync Lite emittance	2 x 144	T:SLPE{X,Y}[0-35]	Remove Halo
Sync Lite sigma	2 x 144	T:SLPS{H,V}[0-35]	Remove Halo
A0 collimator positions	4 x 2	T:A01{DH,DV,UH,UV}	Remove Halo
D17-1 collimator positions	2 x 2	T:D171{H,V}	Remove Halo
D17-2 collimator positions	4 x 2	T:D172{DH,DV,UH,UV}	Remove Halo
D17-3 collimator positions	4 x 2	T:D173{DH,DV,UH,UV}	Remove Halo
D49 collimator positions	2 x 2	T:D49{H,V}	Remove Halo
E0-1 collimator positions	4 x 2	T:E01{DH,DV,UH,UV}	Remove Halo
E0-2 collimator positions	4 x 2	T:E02{DH,DV,UH,UV}	Remove Halo
E0-3 collimator positions	4 x 2	T:E03{DH,DV,UH,UV}	Remove Halo
F17-1 collimator positions	4 x 2	T:F171{DH,DV,UH,UV}	Remove Halo
F17-2 collimator positions	4 x 2	T:F172{DH,DV,UH,UV}	Remove Halo
F48 collimator positions	4 x 2	T:F48{DH,DV,UH,UV}	Remove Halo
F49 collimator positions	2 x 2	T:F49{H,V}	Remove Halo
A0 BPM Snapshot orbit (after halo removal is complete)	20	T:A0BPSN	HEP
A1 house parameters	64	T:A1BPNP	HEP
B0 BPM Snapshot orbit	20	T:B0BPSN	HEP
B0 BLM Snapshot orbit	16	T:B0BLSN	HEP
D0 BPM Snapshot orbit	20	T:D0BPSN	HEP
D0 BLM Snapshot orbit	16	T:D0BLSN	HEP
BA BPM Snapshot orbit	20	T:BABPSN	HEP
BA BLM Snapshot orbit	16	T:BABPLD	HEP
DA BLM Snapshot orbit	16	T:DABLSN	HEP
Ringwide BPM Snapshot orbit	480	T:WNBPSN	HEP
Ringwide BLM Snapshot orbit	384	T:WNBLSN	HEP
Tev horizontal damper status @ flattop	2	T:DHAMP	HEP
Tev horizontal damper gain @ flattop	2	T:DMPHG	HEP
Tev vertical damper status @ flattop	2	T:DVAMP	HEP
Tev vertical damper gain @ flattop	2	T:DMPVG	HEP
Sync Lite amplitude	2 x 144	T:SLPA{H,V}[0-35]	HEP
Sync Lite background	2 x 144	T:SLPB{H,V}[0-35]	HEP
Sync Lite centroid	2 x 144	T:SLPC{H,V}[0-35]	HEP
Sync Lite chi	2 x 144	T:SLPF{H,V}[0-35]	HEP

Sync Lite scale factor	2 x 4	T:SLP{H,V}S	HEP
Sync Lite background slope	2 x 144	T:SLPM{H,V}[0-35]	HEP
Sync Lite emittance	2 x 144	T:SLPE{X,Y}[0-35]	HEP
Sync Lite sigma	2 x 144	T:SLPS{H,V}[0-35]	HEP
Sync Lite ellipse rotation	144	T:SLPERO[0-35]	HEP
B0 CPM proton positions	4 x 4	T:B0{DH,DV,UH,UV}PP	HEP
D0 CPM proton positions	4 x 4	T:D0{DH,DV,UH,UV}PP	HEP
SVT Dx/dz (microradians)	4	C:SVTDX	HEP
Error in dx/dz	4	C:SVTDXE	HEP
SVT dy/dz (microradians)	4	C:SVTDY	HEP
Error in dydz	4	C:SVTDYE	HEP
Global fit validity (1=yes)	4	C:SVTGVL	HEP
SVT global x width (microns)	4	C:SVTGWX	HEP
SVT global y width (microns)	4	C:SVTGWY	HEP
SVT global x position (microns)	4	C:SVTGX	HEP
Error in global x position	4	C:SVTGXE	HEP
SVT global y position (microns)	4	C:SVTGY	HEP
Error in global y position	4	C:SVTGYE	HEP
Fit validity (1=yes)	24	C:SVTVAL[0-5]	HEP
SVT x beam width (microns)	24	C:SVTWX[0-5]	HEP
Error in x beam width	24	C:SVTWXE[0-5]	HEP
SVT y beam width (microns)	24	C:SVTWY[0-5]	HEP
Error in y beam width	24	C:SVTWYE[0-5]	HEP
SVT x position (microns)	24	C:SVTX[0-5]	HEP
X position error	24	C:SVTXE[0-5]	HEP
SVT y position (micron)	24	C:SVTY[0-5]	HEP
Y position error	24	C:SVTYE[0-5]	HEP
Tune x on scope x (value, error, time since last CASE change)	12	T:TUXXAV[0-2]	HEP
Tune y on scope x (value, error, time since last CASE change)	12	T:TUXYAV[0-2]	HEP
Tune x on scope y (value, error, time since last CASE change)	12	T:TUYXAV[0-2]	HEP
Tune y on scope y (value, error, time since last CASE change)	12	T:TUYYAV[0-2]	HEP
All 222 Tev dipole trims	444	T:xxxx; C:xxxx	Pause HEP
Tev FW freshness # (pass1, pass2) @ flattop	8	T:FWFRSH[0-1]	Pause HEP
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEPSG[0-71]	Pause HEP
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHPSG[0-71]	Pause HEP
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVPSG[0-71]	Pause HEP
Tev FW dp/p @ flattop	144	T:WEEP00[0-35]	Pause HEP
Tev FW H emit. @ flattop	144	T:WHEP00[0-35]	Pause HEP
Tev FW V emit. @ flattop	144	T:WVEP00[0-35]	Pause HEP

Pbar Data

Meaning	Bytes	Name	Case
Acc. Core H emittance just before unstacking (300MHz)	4	A:EMT3HN	Transfer Pbars from Acc-MI
Acc. Core V emittance just before unstacking (300MHz)	4	A:EMT3VN	Transfer Pbars from Acc-MI
Not all the following SEM grids are in for every shot!			
SEM900 H mean and gain	2	D:SH900M	Transfer Pbars from Acc-MI
SEM900 H sigma	2	D:SH900S	Transfer Pbars from Acc-MI
SEM917 H mean and gain	2	D:SH917M	Transfer Pbars from Acc-MI
SEM917 H sigma	2	D:SH917S	Transfer Pbars from Acc-MI
SEM921 H mean and gain	2	D:SH921M	Transfer Pbars from Acc-MI
SEM921 H sigma	2	D:SH921S	Transfer Pbars from Acc-MI
SEM926 H mean and gain	2	D:SH926M	Transfer Pbars from Acc-MI
SEM926 H sigma	2	D:SH926S	Transfer Pbars from Acc-MI
SEM900 V mean and gain	2	D:SV900M	Transfer Pbars from Acc-MI
SEM900 V sigma	2	D:SV900S	Transfer Pbars from Acc-MI
SEM917 V mean and gain	2	D:SV917M	Transfer Pbars from Acc-MI
SEM917 V sigma	2	D:SV917S	Transfer Pbars from Acc-MI
SEM921 V mean and gain	2	D:SV921M	Transfer Pbars from Acc-MI
SEM921 V sigma	2	D:SV921S	Transfer Pbars from Acc-MI
SEM926 V mean and gain	2	D:SV926M	Transfer Pbars from Acc-MI
SEM926 V sigma	2	D:SV926S	Transfer Pbars from Acc-MI
Beamline trim used for closure	2	I:HT702S	Transfer Pbars from Acc-MI
Beamline trim used for closure	2	I:HT704S	Transfer Pbars from Acc-MI
Beamline trim used for closure	2	I:VT701S	Transfer Pbars from Acc-MI
Beamline trim used for closure	2	I:VT703S	Transfer Pbars from Acc-MI
MI FW pbar H emit @ 8 GeV	16	I:WHEA02	Transfer Pbars from Acc-MI
MI FW pbar H sigma @ 8 GeV	16	I:WHSA02	Transfer Pbars from Acc-MI
MI FW pbar H emit @ 8 GeV, pass 2	16	I:WHEA04	Transfer Pbars from Acc-MI
MI FW pbar H sigma @ 8 GeV, pass 2	16	I:WHSA04	Transfer Pbars from Acc-MI
MI FW pbar V emit @ 8 GeV	16	I:WVEA02	Transfer Pbars from Acc-MI
MI FW pbar V sigma @ 8 GeV	16	I:WVSA02	Transfer Pbars from Acc-MI
MI FW pbar V emit @ 8 GeV, pass 2	16	I:WVEA04	Transfer Pbars from Acc-MI
MI FW pbar V sigma @ 8 GeV, pass 2	16	I:WVSA04	Transfer Pbars from Acc-MI
Acc. Core H emittance just before unstacking (300MHz)	4	A:EMT3HN	Inject Pbars
Acc. Core V emittance just before unstacking (300MHz)	4	A:EMT3VN	Inject Pbars
MI FW pbar H emit @ 8 GeV	16	I:WHEA02	Inject Pbars
MI FW pbar H sigma @ 8 GeV	16	I:WHSA02	Inject Pbars
MI FW pbar H emit @ 8 GeV, pass 2	16	I:WHEA04	Inject Pbars
MI FW pbar H sigma @ 8 GeV, pass 2	16	I:WHSA04	Inject Pbars
MI FW pbar H emit @ 150 GeV	16	I:WHEA03	Inject Pbars
MI FW pbar H sigma @ 150 GeV	16	I:WHSA03	Inject Pbars
MI FW pbar H emit @ 150 GeV, pass 2	16	I:WHEA05	Inject Pbars
MI FW pbar H sigma @ 150 GeV, pass 2	16	I:WHSA05	Inject Pbars
MI FW pbar V emit @ 8 GeV	16	I:WVEA02	Inject Pbars
MI FW pbar V sigma @ 8 GeV	16	I:WVSA02	Inject Pbars
MI FW pbar V emit @ 8 GeV, pass 2	16	I:WVEA04	Inject Pbars
MI FW pbar V sigma @ 8 GeV, pass 2	16	I:WVSA04	Inject Pbars
MI FW pbar V emit @ 150 GeV	16	I:WVEA03	Inject Pbars

MI FW pbar V sigma @ 150 GeV	16	I:WVSA03	Inject Pbars
MI FW pbar V emit @ 150 GeV, pass 2	16	I:WVEA05	Inject Pbars
MI FW pbar V sigma @ 150 GeV, pass 2	16	I:WVSA05	Inject Pbars
Beamline trim used for tuning	2	I:HT902S[6]	Inject Pbars
Beamline trim used for tuning	2	I:HT904S[6]	Inject Pbars
Beamline trim used for tuning	2	I:VT901S[6]	Inject Pbars
Beamline trim used for tuning	2	I:VT903S[6]	Inject Pbars
Tev FW E11 H sigma (pass1, pass2) @ pbar inj.	288	T:FWEASG[0-71]	Inject Pbars
Tev FW E17 H sigma (pass1, pass2) @ pbar inj.	288	T:FWHASG[0-71]	Inject Pbars
Tev FW E11 V sigma (pass1, pass2) @ pbar inj.	288	T:FWVASG[0-71]	Inject Pbars
Tev FW dp/p @ pbar inj.	144	T:WEEA00[0-35]	Inject Pbars
Tev FW H emit. @ pbar inj.	144	T:WHEA00[0-35]	Inject Pbars
Tev FW V emit. @ pbar inj.	144	T:WVEA00[0-35]	Inject Pbars
MI BLT data buffer	4096	I:BLTATC	Before Ramp
Tev Pbar V BLT positions (mm)	144	T:BLTEAM[0-35]	Before Ramp
Tev Pbar V BLT phase (units?)	144	T:BLTEPH[0-35]	Before Ramp
Tev Pbar V BLT tune	144	T:BLTETU[0-35]	Before Ramp
Tev Pbar H BLT positions (mm)	144	T:BLTOAM[0-35]	Before Ramp
Tev Pbar H BLT phase (units?)	144	T:BLTOPH[0-35]	Before Ramp
Tev Pbar H BLT tune	144	T:BLTOTU[0-35]	Before Ramp
Tev Pbar xfer 1-36 H BLT positions (McG)	36 x 1024	T:TBH(01-36)A	Before Ramp
Tev Pbar xfer 1-36 V BLT positions (McG)	36 x 1024	T:TBV(01-36)A	Before Ramp
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEASG[0-71]	Flattop
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHASG[0-71]	Flattop
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVASG[0-71]	Flattop
Tev FW dp/p @ flattop	144	T:WEEA00[0-35]	Flattop
Tev FW H emit. @ flattop	144	T:WHEA00[0-35]	Flattop
Tev FW V emit. @ flattop	144	T:WVEA00[0-35]	Flattop
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEASG[0-71]	Squeeze
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHASG[0-71]	Squeeze
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVASG[0-71]	Squeeze
Tev FW dp/p @ flattop	144	T:WEEA00[0-35]	Squeeze
Tev FW H emit. @ flattop	144	T:WHEA00[0-35]	Squeeze
Tev FW V emit. @ flattop	144	T:WVEA00[0-35]	Squeeze
Sync Lite amplitude	2 x 144	T:SLAA{H,V}[0-35]	Squeeze
Sync Lite background	2 x 144	T:SLAB{H,V}[0-35]	Squeeze
Sync Lite centroid	2 x 144	T:SLAC{H,V}[0-35]	Squeeze
Sync Lite chi	2 x 144	T:SLAF{H,V}[0-35]	Squeeze
Sync Lite scale factor	2 x 4	T:SLA{H,V}S	Squeeze
Sync Lite background slope	2 x 144	T:SLAM{H,V}[0-35]	Squeeze
Sync Lite emittance	2 x 144	T:SLAE{X,Y}[0-35]	Squeeze
Sync Lite sigma	2 x 144	T:SLAS{H,V}[0-35]	Squeeze
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEASG[0-71]	Initiate Collisions
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHASG[0-71]	Initiate Collisions
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVASG[0-71]	Initiate Collisions
Tev FW dp/p @ flattop	144	T:WEEA00[0-35]	Initiate Collisions
Tev FW H emit. @ flattop	144	T:WHEA00[0-35]	Initiate Collisions
Tev FW V emit. @ flattop	144	T:WVEA00[0-35]	Initiate Collisions
Sync Lite amplitude	2 x 144	T:SLAA{H,V}[0-35]	Initiate Collisions
Sync Lite background	2 x 144	T:SLAB{H,V}[0-35]	Initiate Collisions
Sync Lite centroid	2 x 144	T:SLAC{H,V}[0-35]	Initiate Collisions
Sync Lite chi	2 x 144	T:SLAF{H,V}[0-35]	Initiate Collisions
Sync Lite scale factor	2 x 4	T:SLA{H,V}S	Initiate Collisions

Sync Lite background slope	2 x 144	T:SLAM{H,V}[0-35]	Initiate Collisions
Sync Lite emittance	2 x 144	T:SLAE{X,Y}[0-35]	Initiate Collisions
Sync Lite sigma	2 x 144	T:SLAS{H,V}[0-35]	Initiate Collisions
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEASG[0-71]	Remove Halo
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHASG[0-71]	Remove Halo
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVASG[0-71]	Remove Halo
Tev FW dp/p @ flattop	144	T:WEEA00[0-35]	Remove Halo
Tev FW H emit. @ flattop	144	T:WHEA00[0-35]	Remove Halo
Tev FW V emit. @ flattop	144	T:WVEA00[0-35]	Remove Halo
Sync Lite amplitude	2 x 144	T:SLAA{H,V}[0-35]	Remove Halo
Sync Lite background	2 x 144	T:SLAA{H,V}[0-35]	Remove Halo
Sync Lite centroid	2 x 144	T:SLAB{H,V}[0-35]	Remove Halo
Sync Lite chi	2 x 144	T:SLAC{H,V}[0-35]	Remove Halo
Sync Lite scale factor	2 x 4	T:SLAF{H,V}	Remove Halo
Sync Lite background slope	2 x 144	T:SLA{H,V}S[0-35]	Remove Halo
Sync Lite emittance	2 x 144	T:SLAM{H,V}[0-35]	Remove Halo
Sync Lite sigma	2 x 144	T:SLAE{X,Y}[0-35]	Remove Halo
Sync Lite amplitude	2 x 144	T:SLAA{H,V}[0-35]	HEP
Sync Lite background	2 x 144	T:SLAB{H,V}[0-35]	HEP
Sync Lite centroid	2 x 144	T:SLAC{H,V}[0-35]	HEP
Sync Lite chi	2 x 144	T:SLAF{H,V}[0-35]	HEP
Sync Lite scale factor	2 x 4	T:SLA{H,V}S	HEP
Sync Lite background slope	2 x 144	T:SLAM{H,V}[0-35]	HEP
Sync Lite emittance	2 x 144	T:SLAE{X,Y}[0-35]	HEP
Sync Lite sigma	2 x 144	T:SLAS{H,V}[0-35]	HEP
Sync Lite ellipse rotation	144	T:SLAERO[0-35]	HEP
Tev FW E11 H sigma (pass1, pass2) @ flattop	288	T:FWEASG[0-71]	Pause HEP
Tev FW E17 H sigma (pass1, pass2) @ flattop	288	T:FWHASG[0-71]	Pause HEP
Tev FW E11 V sigma (pass1, pass2) @ flattop	288	T:FWVASG[0-71]	Pause HEP
Tev FW dp/p @ flattop	144	T:WEEA00[0-35]	Pause HEP
Tev FW H emit. @ flattop	144	T:WHEA00[0-35]	Pause HEP
Tev FW V emit. @ flattop	144	T:WVEA00[0-35]	Pause HEP

The indices, *i* = pbar bunch # in the Tevatron (1-36), *j* = pbar shot # (1-9), and *k* = pbar batch # in the MI (1-4), are related in the following way:

i	**j**	**k**
1	1	1
2	1	2
3	1	3
4	1	4
5	4	1
6	4	2
7	4	3
8	4	4
9	7	1
10	7	2
11	7	3
12	7	4
13	2	1
14	2	2
15	2	3
16	2	4
17	5	1
18	5	2
19	5	3
20	5	4
21	8	1
22	8	2
23	8	3
24	8	4
25	3	1
26	3	2
27	3	3
28	3	4
29	6	1
30	6	2
31	6	3
32	6	4
33	9	1
34	9	2
35	9	3
36	9	4