

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

AMOM "ANGULAR MOMENTUM DENSITY" (NtM-S/CM3)
+PPHI "ANGULAR MOMENTUM DENSITY"
+PPHIN "NCLASS Ang Mom Dens"
+PPHIGN_H "H NCLASS Ang Mom Dens"
+PPHIGN_D "D NCLASS Ang Mom Dens"
+PPHIGN_X "Impurity NCLASS Ang Mom Dens"
[VS. x"r/a" ctr AND TIME]

AMOM_IMP "IMP ANGULAR MOMENTUM DENSITY" (NtM-S/CM3)
+PPHIGN_X "Impurity NCLASS Ang Mom Dens"
[VS. x"r/a" ctr AND TIME]

AMTR "ANGULAR MOMENTUM TRANSPORT" (Nt-M/CM3)
+AMTR_MOD "Div(ang. momentum flux) (model)"
+AMTR_OBS "Div(ang. momentum flux) (obs.)"
[VS. x"r/a" ctr AND TIME]

BDENS2D "beam ion density at GC 2d grid" (N/CM**3)
+BDENS2_D "D Beam ion density, GC"
[VS. 2d MC grid (x,th) AND TIME]

BDENSMP "Fast ion density, GC on midplane" (#/CM**3)
+BDENSTOTMP "Fast ion density, GC on midplane"
[VS. MIDPLANE-FLUX SURFACE RADII AND TIME]

BDENSNB "the total/beam density" (N/CM**3)
+NB01_TOT "nb: Beam#01(D), total density"
+NB02_TOT "nb: Beam#02(D), total density"
+NB03_TOT "nb: Beam#03(D), total density"
+NB04_TOT "nb: Beam#04(D), total density"
+NB05_TOT "nb: Beam#05(D), total density"
+NB06_TOT "nb: Beam#06(D), total density"
[VS. x"r/a" ctr AND TIME]

BDENSS "BEAM ION DENSITIES" (N/CM**3)
+BDENS_D "D BEAM ION DENSITY"
[VS. x"r/a" ctr AND TIME]

BDEN_D "BEAM D DENSITY PROFILES" (N/CM**3)
+BDENS_D "D BEAM ION DENSITY"
+MCDENS_D "D BEAM ION DENSITY (MC LIST)"
+MCDEPS_D "NEW D BEAM IONS (MC DEP)"
[VS. x"r/a" ctr AND TIME]

BDEP0 "BEAM DEPOSITION" (N/CM3/SEC)
+SDBBI "BEAM DEPOSITION: BEAM-BEAM II"
+SDBBX "BEAM DEPOSITION: BEAM-BEAM CX"
+SDB_II "BEAM DEP: ioniz. on therm. ions"
+SDB_IE "BEAM DEP: ioniz. on electrons"
+SDB_IZ "BEAM DEP: ioniz. on impurities"
+SDCXD "BEAM DEPOSITION: CX W/D+ IONS"
+SDCXH "BEAM DEPOSITION: CX W/H+ IONS"

[VS. x"r/a" ctr AND TIME]

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BDEP01 "Beam#01(D) deposition" (N/CM3/SEC)
+BDEP01_TOT "bdep: Beam#01(D),total depositio"
+BDEP01_E1 "bdep: Beam#01(D), E-frac no.1"
+BDEP01_E2 "bdep: Beam#01(D), E-frac no.2"
+BDEP01_E3 "bdep: Beam#01(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

BDEP02 "Beam#02(D) deposition" (N/CM3/SEC)
+BDEP02_TOT "bdep: Beam#02(D),total depositio"
+BDEP02_E1 "bdep: Beam#02(D), E-frac no.1"
+BDEP02_E2 "bdep: Beam#02(D), E-frac no.2"
+BDEP02_E3 "bdep: Beam#02(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

BDEP03 "Beam#03(D) deposition" (N/CM3/SEC)
+BDEP03_TOT "bdep: Beam#03(D),total depositio"
+BDEP03_E1 "bdep: Beam#03(D), E-frac no.1"
+BDEP03_E2 "bdep: Beam#03(D), E-frac no.2"
+BDEP03_E3 "bdep: Beam#03(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

BDEP04 "Beam#04(D) deposition" (N/CM3/SEC)
+BDEP04_TOT "bdep: Beam#04(D),total depositio"
+BDEP04_E1 "bdep: Beam#04(D), E-frac no.1"
+BDEP04_E2 "bdep: Beam#04(D), E-frac no.2"
+BDEP04_E3 "bdep: Beam#04(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

BDEP05 "Beam#05(D) deposition" (N/CM3/SEC)
+BDEP05_TOT "bdep: Beam#05(D),total depositio"
+BDEP05_E1 "bdep: Beam#05(D), E-frac no.1"
+BDEP05_E2 "bdep: Beam#05(D), E-frac no.2"
+BDEP05_E3 "bdep: Beam#05(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

BDEP06 "Beam#06(D) deposition" (N/CM3/SEC)
+BDEP06_TOT "bdep: Beam#06(D),total depositio"
+BDEP06_E1 "bdep: Beam#06(D), E-frac no.1"
+BDEP06_E2 "bdep: Beam#06(D), E-frac no.2"
+BDEP06_E3 "bdep: Beam#06(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

BDEP0_D "BEAM DEPOSITION (D)" (N/CM3/SEC)
+SDBBI_D "D BEAM DEPOSITION: BEAM-BEAM II"
+SDBBX_D "D BEAM DEPOSITION: BEAM-BEAM CX"
+SDBII_D "D BEAM DEP: IONIZ. on therm.ions"
+SDBIE_D "D BEAM DEP: IONIZ. on electrons"
+SDBIZ_D "D BEAM DEP: IONIZ. on impurities"
+SDCXD_D "D BEAM DEPOSITION: CX W/D+ IONS"
+SDCXH_D "D BEAM DEPOSITION: CX W/H+ IONS"

[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

BDEP0_D1 "Full Energy Beam Depo. (D)" (N/CM3/SEC)

+SDBBI_D1 "Full E D BEAM DEP: BEAM-BEAM II"
+SDBBX_D1 "Full E D BEAM DEP: BEAM-BEAM CX"
+SDBII_D1 "Full E D BEAM DEP: II on th.ions"
+SDBIE_D1 "Full E D BEAM DEP: II on (e-)"
+SDBIZ_D1 "Full E D BEAM DEP: IONIZ. on imp"
+SDCX_D1 "Full E D BEAM DEP: CX W/D+ IONS"
+SDCXH_D1 "Full E D BEAM DEP: CX W/H+ IONS"

[VS. x"r/a" ctr AND TIME]

BDEP0_D2 "Half Energy Beam Depo. (D)" (N/CM3/SEC)

+SDBBI_D2 "Half E D BEAM DEP: BEAM-BEAM II"
+SDBBX_D2 "Half E D BEAM DEP: BEAM-BEAM CX"
+SDBII_D2 "Half E D BEAM DEP: II on th.ions"
+SDBIE_D2 "Half E D BEAM DEP: II on (e-)"
+SDBIZ_D2 "Half E D BEAM DEP: IONIZ. on imp"
+SDCX_D2 "Half E D BEAM DEP: CX W/D+ IONS"
+SDCXH_D2 "Half E D BEAM DEP: CX W/H+ IONS"

[VS. x"r/a" ctr AND TIME]

BDEP0_D3 "1/3 Energy Beam Depo. (D)" (N/CM3/SEC)

+SDBBI_D3 "1/3 E D BEAM DEP: BEAM-BEAM II"
+SDBBX_D3 "1/3 E D BEAM DEP: BEAM-BEAM CX"
+SDBII_D3 "1/3 E D BEAM DEP: II on th.ions"
+SDBIE_D3 "1/3 E D BEAM DEP: II on (e-)"
+SDBIZ_D3 "1/3 E D BEAM DEP: IONIZ. on imp"
+SDCX_D3 "1/3 E D BEAM DEP: CX W/D+ IONS"
+SDCXH_D3 "1/3 E D BEAM DEP: CX W/H+ IONS"

[VS. x"r/a" ctr AND TIME]

BDEPNB "the total/beam deposition" (N/CM3/SEC)

+BDEP01_TOT "bdep: Beam#01(D),total depositio"
+BDEP02_TOT "bdep: Beam#02(D),total depositio"
+BDEP03_TOT "bdep: Beam#03(D),total depositio"
+BDEP04_TOT "bdep: Beam#04(D),total depositio"
+BDEP05_TOT "bdep: Beam#05(D),total depositio"
+BDEP06_TOT "bdep: Beam#06(D),total depositio"

[VS. x"r/a" ctr AND TIME]

BDEPS "BEAM DEPOSITION TOTAL SOURCE" (N/CM3/SEC)

+BDEP_D "D BEAM DEPOSITION (TOTAL)"
+SDEP_D "D BEAM ORBIT AV DEP (TOTAL)"

[VS. x"r/a" ctr AND TIME]

BDEPS_D "D BEAM DEP FULL/HALF/THIRD SCES" (N/CM3/SEC)

+BDEPE_D1 "FULL E D BEAM DEP (TOTAL)"
+BDEPE_D2 "HALF E D BEAM DEP (TOTAL)"
+BDEPE_D3 "1/3 E D BEAM DEP (TOTAL)"

[VS. x"r/a" ctr AND TIME]

BEPLL2D "beam ion <Epl1> at GC 2d grid" (eV)
+BEPLL2_D "D Beam ion <Epl1>, GC"
[VS. 2d MC grid (x,th) AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

BEPRP2D "beam ion <Eperp> at GC 2d grid" (eV)
+BEPRP2_D "D Beam ion <Eperp>, GC"
[VS. 2d MC grid (x,th) AND TIME]

BETOR "BETA TOROIDALS" ()
+BTBE "BEAM BETA TOROIDAL"
+BTE "ELECTRON BETA TOROIDAL"
+BTI "ION BETA TOROIDAL"
+BTPL "PLASMA BETA TOROIDAL"
+BTTOT "TOTAL BETA TOROIDAL"
+BTROT "ROTATION BETA TOROIDAL"
[VS. x"r/a" ctr AND TIME]

BMHTG "FAST ION HEATING PROFILES" (WATTS/CM3)
+PBI "BEAM HEATING OF IONS"
+PBE "BEAM HEATING OF ELECTRONS"
+PBTH "FAST ION THERMALIZATION POWER"
[VS. x"r/a" ctr AND TIME]

BMINMAX "Bmin & Bmax on flux surfaces" (Tesla)
+BMAX "Bmax on flux surface"
+BMIN "Bmin on flux surface"
[VS. x"r/a" ctr AND TIME]

BN00 "BEAM 1.GEN NEUTRAL DENSITY" (N/CM**3)
+BN0T1 "N0(BEAM):1.GEN 1/1*EB"
+BN0T2 "N0(BEAM):1.GEN 1/2*EB"
+BN0T3 "N0(BEAM):1.GEN 1/3*EB"
[VS. x"r/a" ctr AND TIME]

BRCAP "FAST ION RECAPTURE" (N/CM3/SEC)
+SBCX0 "FAST ION CX: NEUTRALS BORN"
+SBXR_II "FAST ION RECAPTURE on th.ions"
+SBXR_IE "FAST ION RECAPTURE on electrons"
+SBXR_IZ "FAST ION RECAPTURE on impurities"
+SBXRB "FAST ION CX: BEAM-BEAM RECAPTURE"
+SBXRD "BEAM CX: RECAPTURE BY CX W/D+"
+SBXRH "BEAM CX: RECAPTURE BY CX W/H+"
[VS. x"r/a" ctr AND TIME]

BRCAP_D "BEAM RECAPTURE (D)" (N/CM3/SEC)
+SBCX0_D "D BEAM CX: NEUTRALS BORN"
+SBXR_I_D "D B RECAP by ioniz: th.ions"
+SBXR_E_D "D B RECAP by ioniz: electrons"
+SBXR_Z_D "D B RECAP by ioniz: impurities"
+SBXRB_D "D BEAM CX: RECAPTURE: BEAM-BEAM"
+SBXRD_D "D BEAM CX: RECAPTURE BY CX W/D+"
+SBXRH_D "D BEAM CX: RECAPTURE BY CX W/H+"

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[VS. x"r/a" ctr AND TIME]

BTQCOLS    "FAST ION COLLISIONAL TORQUES"  (Nt-M/CM3)
+TQBCO_D   "D BEAM COLLISIONAL TORQUE"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

BTQJXBS    "FAST ION TORQUES (JXB)"  (Nt-M/CM3)
+TQJXB_D   "D BEAM JXB TORQUE"
[VS. x"r/a" ctr AND TIME]

BTQRPLS    "FAST ION RPL TORQUES (JXB)"  (Nt-M/CM3)
+TQRPL_D   "D BEAM RPL JXB TORQUE"
[VS. x"r/a" ctr AND TIME]

BUDENS     "BEAM ION ENERGY DENSITIES"  (JLES/CM3)
+UBPRP_D   "D BEAM PERP ENERGY DENSITY"
+UBPAR_D   "D BEAM PLL ENERGY DENSITY"
[VS. x"r/a" ctr AND TIME]

BVTOR2D    "beam ion <Vtor> at GC 2d grid"  (cm/sec)
+BVTOR2_D  "D Beam ion <Vtor>, GC"
[VS. 2d MC grid (x,th) AND TIME]

CHIPH      "MODEL VS EXP CHI(PHI)"  (CM**2/SEC)
+CHPHI     "MOMENTUM DIFFUSIVITY"
+CHPHM     "MOMENTUM CHI(PHI) MODEL"
+CHPHDAT   "MOMENTUM CHI(PHI) DATA"
+CHPHMTB   "MOMENTUM CHI(PHI) TURBULENT"
+CHPHMNC   "MOMENTUM CHI(PHI) NEOCLASSICAL"
[VS. x"r/a" bdy AND TIME]

CHIPHA     "ANALYSIS vs. PREDICTIVE MODEL Chi(Phi)"  (CM**2/SEC)
+CHPHI     "MOMENTUM DIFFUSIVITY"
+CHPHM     "MOMENTUM CHI(PHI) MODEL"
[VS. x"r/a" bdy AND TIME]

CHIS       "DIFFUSIVITIES"  (CM**2/SEC)
+CONDE     "ELECTRON HEAT DIFFUSIVITY"
+CONDEF    "1 FLUID "EFFECTIVE" CHI"
+DIFFE     "ELEC PTCL DIFFUSIVITY"
+DIFWE     "ELEC PTCL DIFFUSIVITY (WARE)"
+CONDI     "ION HEAT DIFFUSIVITY"
+CHPHI     "MOMENTUM DIFFUSIVITY"
[VS. x"r/a" bdy AND TIME]

CHI_ETG    "HORTON ETG MODEL DIFFUSIVITY"  (CM**2/SEC)
+XKEETG    "HORTON ETG MODEL CHI(E)"
[VS. x"r/a" bdy AND TIME]

CHI_GKF    "IFS-PPPL GYROFLUID CHIS"  (CM**2/SEC)
+CONDE     "ELECTRON HEAT DIFFUSIVITY"
+CONDI     "ION HEAT DIFFUSIVITY"

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+XKAPIGKF "IFS-PPPL GYROFLUID MODEL CHI(I)"
+XKAPEGKF "IFS-PPPL GYROFLUID MODEL CHI(E)"
[VS. x"r/a" bdy AND TIME]

CHI_GLF "GLF23 CHIS" (CM**2/SEC)
+XKIGLF23 "GLF23 MODEL CHI(I)"
+XKEGLF23 "GLF23 MODEL CHI(E)"
+DIFFIGLF "GLF23 ION DIFFUSIVITY"
+ETPHIGLF "GLF23 MOM (TOR) DIFFUSIVITY"
+ETPARGLF "GLF23 MOM (PAR) DIFFUSIVITY"
+ETPERGLF "GLF23 MOM (PERP) DIFFUSIVITY"
[VS. x"r/a" bdy AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

CHI_KB "MMM95 KIN BALLOON DIFFUSIVITY" (CM**2/SEC)
+THIKB "MMM95 ION THER DIFF (KB)"
+THDKB "MMM95 ION DIFF (KB)"
+THEKB "MMM95 ELEC THER DIFF (KB)"
+THZKB "MMM95 IMP DIFF (KB)"
[VS. x"r/a" bdy AND TIME]

CHI_MMM "MMM95 CHIS" (CM**2/SEC)
+XKIMMM95 "MMM95 MODEL CHI(I)"
+XKEMMM95 "MMM95 MODEL CHI(E)"
[VS. x"r/a" bdy AND TIME]

CHI_RB "MMM95 RES BALLOON DIFFUSIVITY" (CM**2/SEC)
+THIRB "MMM95 ION THER DIFF (RB)"
+THDRB "MMM95 ION DIFF (RB)"
+THERB "MMM95 ELEC THER DIFF (RB)"
+THZRB "MMM95 IMP DIFF (RB)"
[VS. x"r/a" bdy AND TIME]

CHI_WEI "MMM95 WEILAND DIFFUSIVITY" (CM**2/SEC)
+THIIG "MMM95 ION THER DIFF (WEILAND)"
+THDIG "MMM95 ION DIFF (WEILAND)"
+THEIG "MMM95 ELEC THER DIFF (WEILAND)"
+THZIG "MMM95 IMP DIFF (WEILAND)"
[VS. x"r/a" bdy AND TIME]

CONDS "DIFFUSIVITIES" (CM**2/SEC)
+CONDIWNC "NCLASS ion heat diffusivity"
+CONDICWNC "NCLASS ion class heat diffus"
+CONDE "ELECTRON HEAT DIFFUSIVITY"
+FKCHH "CHI(I) NC CHANG-HINTON ORIGINAL: TRANSP"
+CONDI "ION HEAT DIFFUSIVITY"
+CHPHI "MOMENTUM DIFFUSIVITY"
[VS. x"r/a" bdy AND TIME]

CONDWNCS "NCLASS DIFFUSIVITIES" (CM**2/SEC)
+CONDIWNC "NCLASS ion heat diffusivity"
+CONDWNCE "NCLASS e- heat diffusivity"
+CONDWNCX "NCLASS Imp heat diffusivity"

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+CONDWNCD  "NCLASS D+ heat diffusivity"
+CONDWNCH  "NCLASS H heat diffusivity"
           [VS. x"r/a" bdy AND TIME]

CPBOLO     "PRAD READ AND CALCULATED" (WATTS/CM3)
+PRADC     "NET RADIATED POWER (THEORY)"
+PRAD_BR   "BREMSSTRAHLUNG RADIATION"
+PRAD_LI   "LINE RADIATION"
+PRAD_CY   "CYCLOTRON RADIATION"
           [VS. x"r/a" ctr AND TIME]

CQIE       "ION-ELECTRON COUPLING" (WATTS/CM3)
+QIE       "ION-ELECTRON COUPLING"
+QIESLVTX  "ION-ELECTRON COUPLING(SLVTX)"
           [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

DENS0      "THERMAL NEUTRAL DENSITIES" (N/CM**3)
+DN0VD     "VOL NEUTRAL DENSITY G=D"
+DN0WD     "WALL NEUTRAL DENS G=D"
+DN0VH     "VOL NEUTRAL DENSITY G=H"
+DN0WH     "WALL NEUTRAL DENS G=H"
           [VS. x"r/a" ctr AND TIME]

DENS0AGF   "all gas flow densities" (N/CM**3)
+N0GF_H_H  "H n0 due to H gas flow"
+N0GF_D_H  "D n0 due to H gas flow"
+N0GF_H_D  "H n0 due to D gas flow"
+N0GF_D_D  "D n0 due to D gas flow"
           [VS. x"r/a" ctr AND TIME]

DENS0ARC   "all recyc densities" (N/CM**3)
+N0RC_H_H  "H n0 due to H recyc"
+N0RC_D_H  "D n0 due to H recyc"
+N0RC_H_D  "H n0 due to D recyc"
+N0RC_D_D  "D n0 due to D recyc"
           [VS. x"r/a" ctr AND TIME]

DENS0HALO  "Beam halo neutral densities" (N/CM**3)
+N0BH_H    "beam halo neutral density G=H"
+N0BH_D    "beam halo neutral density G=D"
           [VS. x"r/a" ctr AND TIME]

DENS0SGF   "summed gas flow neutral dens." (N/CM**3)
+N0SGF_H   "gas flow neutral dens G=H"
+N0SGF_D   "gas flow neutral dens G=D"
           [VS. x"r/a" ctr AND TIME]

DENS0SRC   "summed recycling neutral dens." (N/CM**3)
+N0SRC_H   "recycling neutral dens G=H"
+N0SRC_D   "recycling neutral dens G=D"
           [VS. x"r/a" ctr AND TIME]

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DIFBX "Fast ion anomalous diffusivity" (CM**2/SEC)
+BDIFBX_D "D anom beam ion diffusivity"
[VS. x"r/a" bdy AND TIME]

DNSB0 "BEAM NEUTRAL DENSITIES" (N/CM**3)
+N0BCXD0 "CX FAST NEUTRAL DENSITY (D0)"
+N0BD0 "1.GEN FAST NEUTRAL DENSITY (D0)"
[VS. x"r/a" ctr AND TIME]

DRBM_FR "DRBM FREQUENCY (MODE 1, 2, 3)" (RAD/SEC)
+OMGDRBM1 "DRBM FREQUENCY MODE=1"
+OMGDRBM2 "DRBM FREQUENCY MODE=2"
+OMGDRBM3 "DRBM FREQUENCY MODE=3"
[VS. x"r/a" bdy AND TIME]

DRBM_GR "DRBM GROWTH RATES (MODE 1, 2, 3)" (1/SEC)
+GAMDRBM1 "DRBM GRTH RATE MODE=1"
+GAMDRBM2 "DRBM GRTH RATE MODE=2"
+GAMDRBM3 "DRBM GRTH RATE MODE=3"
[VS. x"r/a" bdy AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

E0BAL "PLASMA FRAME NEUTRAL POWER BAL" (WATTS/CM3)
+PCX "CHARGE EXCHANGE LOSS"
-PNI "NEUTRAL IONIZATION SOURCE"
-BALE0 "NEUTRAL POWER BALANCE"
+S0VLE "TOTAL NEUTRAL VOL SCE"
+FL0EI "DIV(NEUTRAL E-INFLUX)"
-FL0EX "DIV(NEUTRAL E-OUTFLUX)"
[VS. x"r/a" ctr AND TIME]

E0BAL_AGF "gas flow neutral power bal all" (WATTS/CM3)
+PCXGF_H "CX POWER to H gas NEUTRALS"
-PIGF_H "H gas flow ionization POWER"
-PFLX0GF_H "H DIV(gas flow POWER FLUX)"
-BALE0_GF_H "H gas flow POWER BALANCE"
+PCXGF_D "CX POWER to D gas NEUTRALS"
-PIGF_D "D gas flow ionization POWER"
-PFLX0GF_D "D DIV(gas flow POWER FLUX)"
-BALE0_GF_D "D gas flow POWER BALANCE"
[VS. x"r/a" ctr AND TIME]

E0BAL_ARC "recyc neutral power bal all" (WATTS/CM3)
+PCXRC_H "CX POWER to H recyc NEUTRALS"
-PIRC_H "H recyc ionization POWER"
-PFLX0RC_H "H DIV(recyc POWER FLUX)"
-BALE0_RC_H "H recyc POWER BALANCE"
+PCXRC_D "CX POWER to D recyc NEUTRALS"
-PIRC_D "D recyc ionization POWER"
-PFLX0RC_D "D DIV(recyc POWER FLUX)"
-BALE0_RC_D "D recyc POWER BALANCE"
[VS. x"r/a" ctr AND TIME]

E0BAL_HALO "Beam Halo neutral power balance" (WATTS/CM3)
 +P0HALO "HALO NEUTRAL SCE POWER"
 +PCXHALO "CX POWER TO HALO NEUTRALS"
 -PIHALO "HALO NEUTRAL RECAPTURE POWER"
 -PFLX0HALO "DIV(HALO NEUTRAL POWER FLUX)"
 -BALE0_HALO "HALO NEUTRAL POWER BALANCE"
 [VS. x"r/a" ctr AND TIME]

E0BAL_SGF "gas flow neutral power bal sum" (WATTS/CM3)
 +PCXSGF "CX POWER to gas flow NEUTRALS"
 -PISGF "gas fl neutral ionization POWER"
 -PFLX0SGF "DIV(gas flow NEUTRAL POWER FLUX)"
 -BALE0_SGF "gas flow NEUTRAL POWER BALANCE"
 [VS. x"r/a" ctr AND TIME]

E0BAL_SRC "recyc neutral power bal sum" (WATTS/CM3)
 +PCXSRC "CX POWER to recyling NEUTRALS"
 -PISRC "recyc neutral ionization POWER"
 -PFLX0SRC "DIV(recyling NEUTRAL POWER FLUX)"
 -BALE0_SRC "recyling NEUTRAL POWER BALANCE"
 [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

EBAPLMP "FAST ION <Epl1> , GC on midplane" (eV)
 +EBAPLAV_MP "FAST ION <Epl1> , GC on midplane"
 [VS. MIDPLANE-FLUX SURFACE RADII AND TIME]

EBAPPMP "FAST ION <Eperp>, GC on midplane" (eV)
 +EBAPPAV_MP "FAST ION <Eperp>, GC on midplane"
 [VS. MIDPLANE-FLUX SURFACE RADII AND TIME]

ECON "ENERGY CONFINEMENT" (SECONDS)
 +TEE "ELECTRON ENERGY CONFINEMENT"
 +TEI "ION ENERGY CONFINEMENT"
 +TAUE "PLASMA ENERGY CONFINEMENT"
 [VS. x"r/a" bdy AND TIME]

ECONST "ENERGY CONFINEMENT ("*" VSNS)" (SECONDS)
 +TEE "ELECTRON ENERGY CONFINEMENT"
 +TEEST "ELECTRON ENERGY CONFINEMENT (*)"
 +TEI "ION ENERGY CONFINEMENT"
 +TEIST "ION ENERGY CONFINEMENT (*)"
 +TAUES "PLASMA ENERGY CONFINEMENT (*)"
 +TAUE "PLASMA ENERGY CONFINEMENT"
 [VS. x"r/a" bdy AND TIME]

EEBAL "ELECTRON POWER BALANCE" (WATTS/CM3)
 -PION "NEUTRAL IONIZATION WORK"
 -PRAD "NET RADIATED POWER USED"
 -PCNVE "ELECTRON CONVECTION LOSS"
 -GAINE "ELECTRON GAIN"
 -PCNDE "ELECTRON CONDUCTION LOSS"
 -QIE "ION-ELECTRON COUPLING"

+EHEAT "TOTAL ELECTRON HEATING"
+TEBAL "ELECTRON POWER BALANCE"
[VS. x"r/a" ctr AND TIME]

EEHEAT "ELECTRON HEATING" (WATTS/CM3)
+POH "OHMIC HEATING POWER"
+PBE "BEAM HEATING OF ELECTRONS"
+PCMPE "ELECTRON COMPRESSION"
+EHEAT "TOTAL ELECTRON HEATING"
+BOGUSE "BOGUS HEATING TO KEEP TE > 0"
[VS. x"r/a" ctr AND TIME]

EETR "ELECTRON ENERGY TRANSPORT" (WATTS/CM3)
+EETR_MOD "Div(elec energy flux) (model)"
+EETR_OBS "Div(elec energy flux) (observed)"
[VS. x"r/a" ctr AND TIME]

EPBAL "ELECTRON PTCL BALANCE" (N/CM3/SEC)
+SBE "ELECTRON SCE FAST ION DEPOSITION"
-DNEDT "D/DT(ELECTRON DENSITY)"
-DIVFE "DIV(ELECTRON FLUX)"
+SCEW "ELECTRON SCE (WALL NEUTRALS)"
+SCEV "ELECTRON SCE (VOL. NEUTRALS)"
+SCEZ "ELECTRON SCE (Impurity Ioniz.)"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

EPOT "ELECTROSTATIC POTENTIAL" (VOLTS)
+EPOTNC "ER POTENTIAL: NC ANALYSIS"
+VRPOT "RADIAL ELECTRICAL POTENTIAL"
+EPOTRO "RADIAL POTENTIAL due to ROTATION"
[VS. x"r/a" bdy AND TIME]

EPTR "ELECTRON PTCL TRANSPORT" (N/CM3/SEC)
+EPTR_MOD "Div(electron flux) (model)"
+EPTR_OBS "Div(electron flux) (observed)"
[VS. x"r/a" ctr AND TIME]

ERAD "NC Diagnostic Radial E Field" (V/CM)
+ERTOT "NC radial E Field"
+ERPRESS "NC radial E field, Pressure term"
+ERVPOL "NC radial E field, Vpol term"
+ERVTOR "NC radial E field, Vtor term"
[VS. MIDPLANE-FLUX SURFACE RADII AND TIME]

ETAS "RESISTIVITIES" (OHM*CM)
+ETA_USE "RESISTIVITY USED OR INFERRED"
+ETA_NC "NC RESISTIVITY (old fit)"
+ETA_SP "SPITZER RESISTIVITY"
+ETA_SPS "SPITZER RESISTIVITY (Sauter)"
+ETA_WNC "NCLASS Resistivity"
+ETA_TSC "TSC Neoclassical Resistivity"
+ETA_SNC "Sauter Neoclassical Resistivity"

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[VS. x"r/a" ctr AND TIME]

ETATH      "ETA(THERMAL)S"  ()
+ETAE      "D(LN(TE))/D(LN(NE))"
+ETAI      "D(LN(TI))/D(LN("NI"))"
+ETAIE     "D(LN(TI))/D(LN(NE))"
[VS. x"r/a" bdy AND TIME]

FB          "B FIELD FACTORS"  ()
+FBX       "|B|/|BT(EXTERNAL)|"
+FBTX      "|BT|/|BT(EXTERNAL)|"
[VS. MIDPLANE-FLUX SURFACE RADII AND TIME]

FBOLO      "BOLOMETER EFLUXES" (W/CM2/DSA)
+BLEFL     "TOTAL BOLO PTCL EFLUX"
+BLFDA     "MEASURED FLUX (INPUT DATA)"
+BLFAA     "ADJUSTED FLUX (USED FOR PRAD)"
+BLFTH     "THERMAL BOLO PTCL EFLUX"
+BLFBM     "BEAM BOLO PTCL EFLUX"
[VS. CHORD IND. (BOLO) AND TIME]

FBP         "|BP|/|BT| COMPARISON"  ()
+FBPBT     "|BP|/|BT| COMPUTED"
[VS. MIDPLANE-FLUX SURFACE RADII AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

FBTH        "FAST ION DENSITIES" (N/CM**3)
+FBTH1     "FI DIST 0.< R/A <.2"
+FBTH2     "FI DIST .2< R/A <.4"
+FBTH3     "FI DIST .4< R/A <.6"
+FBTH4     "FI DIST .6< R/A <.8"
+FBTH5     "FI DIST .8< R/A <1."
[VS. POL. ANGLE AND TIME]

FBTRAP_D    "D beam ion banana fractions"  ()
+BTRAP0_D   "D beam full E dep banana frac."
+BTRAP_D    "D beam ions banana fraction"
[VS. x"r/a" ctr AND TIME]

FPAX        "FRAC. BEAM SCATTERING>IMPURITIES"  ()
+FPAX_D     "D BEAM SCATTERING >IMPURITIES"
[VS. x"r/a" ctr AND TIME]

FPBX        "FRACTIONAL BEAM DRAG->IMPURITIES"  ()
+FPBX_D     "D BEAM DRAG >IMPURITIES"
[VS. x"r/a" ctr AND TIME]

GCHK        "G PARA/DIAMAGNETIC CHECK"  ()
+GFUN       "G: PARA/DIAMAGNETISM"
+GFUNC      "G: GRAD-SHAF EQUILIBRIUM CHECK"
+GDATA      "G profile (Ufile data)"
[VS. x"r/a" bdy AND TIME]

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GDBAL "PTCL BALANCE ION (D+)" (N/CM3/SEC)
 -DNDDT "D/DT(ION DENS D+)"
 -DIVFD "DIV(ION FLUX D+)"
 +SVD "TOT ION SCE BEAM+HALO D+"
 +SWD "TOT ION SCE WALL D+"
 +SBAL_D "D PTCL BALANCE"
 [VS. x"r/a" ctr AND TIME]

GEOPARM "surface geometry parameters" (
 +ELONG "Flux surface elongation"
 +TRIANG "Flux surface triangularity"
 +TRIANGU "Flux surf. upper triangularity"
 +TRIANGL "Flux surf. lower triangularity"
 +SQUARE_UO "Flux surf upper outer squareness"
 +SQUARE_LO "Flux surf lower outer squareness"
 [VS. x"r/a" bdy AND TIME]

GFL_NC "NC Ptc1 Transport" (N/CM3/SEC)
 +GFLNC_E "div(NC ptcl flux) electrons"
 +GFLNC_X "div(NC ptcl flux) impurity"
 +GFLNC_I "div(NC ptcl flux) thermal ions"
 +GFLNC_D "div(NC ptcl flux) thermal D+"
 +GFLNC_H "div(NC ptcl flux) thermal H+"
 [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

GHBAL "PTCL BALANCE ION (H+)" (N/CM3/SEC)
 -DNHDT "D/DT(ION DENS H+)"
 -DIVHT "DIV(ION FLUX H+)"
 +SVH "TOT ION SCE BEAM+HALO H+"
 +SWH "TOT ION SCE WALL H+"
 +SBAL_H "H PTCL BALANCE"
 [VS. x"r/a" ctr AND TIME]

GRBCOM "GRB data map check" (Tesla*cm)
 +GRB_USE "GRB data as used"
 +GRB_IN "GRB data as input"
 [VS. MAJOR RADII (DATA MAPPING) AND TIME]

IEBAL "ION POWER BALANCE" (WATTS/CM3)
 +PBTH "FAST ION THERMALIZATION POWER"
 -GAINI "ION GAIN"
 -PCOND "ION CONDUCTION LOSS"
 +QIE "ION-ELECTRON COUPLING"
 -P0NET "NET CHARGE EXCHANGE LOSS"
 -PCONV "ION CONVECTION LOSS"
 +QROT "E(ROT)=> ION HEAT: CONV+FRICTION"
 +IHEAT "TOTAL ION HEATING"
 +TIBAL "ION POWER BALANCE"
 [VS. x"r/a" ctr AND TIME]

IEBALR "IEBAL: ROTATION TERMS" (WATTS/CM3)
 +PBTHA "BEAM WORK -> ROTATION (TH-ASSYM)"

+QROTf "E(ROT)=>ION HEATING: FRICTION"
 +QROTC "E(ROT)=>ION HEATING: CONVECTIVE"
 +QROT "E(ROT)=> ION HEAT: CONV+FRICTION"
 [VS. x"r/a" ctr AND TIME]

IEHEAT "ION HEATING" (WATTS/CM3)
 +PBI "BEAM HEATING OF IONS"
 +PCMPI "ION COMPRESSION"
 +IHEAT "TOTAL ION HEATING"
 +BOGUSI "BOGUS HEATING TO KEEP TI > 0"
 [VS. x"r/a" ctr AND TIME]

IETR "ION ENERGY TRANSPORT" (WATTS/CM3)
 +IETR_MOD "Div(ion energy flux) (model)"
 +IETR_OBS "Div(ion energy flux) (observed)"
 [VS. x"r/a" ctr AND TIME]

IMBAL "IMPURITY PTCL BALANCE" (N/CM3/SEC)
 -DNIMP "D/DT(IMPURITY DENSITY)"
 -DFIMP "DIV(IMPURITY FLUX)"
 +SCIMP "IMPURITY SOURCE"
 -DZIMP "D/DT(IMPURITY SPECIE)"
 [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

IPBAL "ION PTCL BALANCE" (N/CM3/SEC)
 -DNIDT "D/DT(TOTAL ION DENSITY)"
 -DIVFI "DIV(TOTAL ION FLUX)"
 +SBTOT "TOTAL ION SCE(BEAM + HALO)"
 +SWTOT "TOTAL ION SCE(WALL NEUTRALS)"
 +SBAL_ION "Total Ion Particle Balance"
 [VS. x"r/a" ctr AND TIME]

IPTR "ION PTCL TRANSPORT" (N/CM3/SEC)
 +IPTR_MOD "Div(total ion flux) (model)"
 +IPTR_OBS "Div(total ion flux) (observed)"
 [VS. x"r/a" ctr AND TIME]

IRB "fast ion radial currents" (AMPS)
 +CURBRORB "FAST ION RADIAL CURRENT (ORBIT)"
 +CURBRABD "FAST ION RAD.CUR (ANOM DIFFUS)"
 +CURBRFSH "FAST ION RAD.CUR (FISHBONES)"
 +CURBRRIP "FAST ION RAD.CUR (RIPPLE LOSS)"
 [VS. x"r/a" bdy AND TIME]

IRBCMP "fast ion rad. cur (2 methods)" (AMPS)
 +CURBRORB "FAST ION RADIAL CURRENT (ORBIT)"
 [VS. x"r/a" bdy AND TIME]

IRB_D "beam ion radial currents (D)" (AMPS)
 +IBRORB_D "D BEAM ION RADIAL CUR (ORBIT)"
 [VS. x"r/a" bdy AND TIME]

ITEMP "ION TEMPERATURES" (EV)
 +TIPRO "MEASURED TI PROFILE"
 +TI "ION TEMPERATURE"
 +TX "IMPURITY TEMPERATURE"
 +TMJ "H/HE MAJORITY TEMPERATURE"
 +TIAV "TIavg=(nx*TX+nmj*TMJ)/(nx+nmj)"
 [VS. x"r/a" ctr AND TIME]

ITG "ION TEMPERATURE GRADIENT DATA" ()
 +RLTCRGKF "R/LTi: critical ITG main br."
 +RLTCRGKZ "R/LTi: critical ITG Carbon br."
 +RLTI "R/LTi: actual ITG:R*Grad(Ti)/Ti"
 [VS. x"r/a" bdy AND TIME]

JBFACS "BEAM CURRENT SHIELDING FACTOR" ()
 +JBFAC "Species avg Jb shielding"
 +JBFACZ1 "Z=1 Jb shielding"
 [VS. x"r/a" ctr AND TIME]

JMHD "FLUX SURFACE AVGS INVOLVING J" (AMPS/CM)
 +JGPHR2I "<J.grad(phi)>/<1/R**2>"
 +PLJBBGPI "<J.B>/<B.grad(phi)>"
 [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

KAPA "THERMAL DIFFUSIVITY 1" (CM**2/SEC)
 +CONDE "ELECTRON HEAT DIFFUSIVITY"
 +CONDEF "1 FLUID "EFFECTIVE" CHI"
 +KETOT "CHI(E) "COUNTING" CONVECTION"
 +CONDI "ION HEAT DIFFUSIVITY"
 +XKINC "NEOCLASSICAL CHI(I)"
 [VS. x"r/a" bdy AND TIME]

KAPA6 "THERMAL DIFFUSIVITY 6" (CM**2/SEC)
 +CONDE "ELECTRON HEAT DIFFUSIVITY"
 +KETOT "CHI(E) "COUNTING" CONVECTION"
 +XETE0 "CHI:E(ETA(E)) GUZDAR"
 +XETAE "CHI:E(ETA(E)) ACTIVE"
 [VS. x"r/a" bdy AND TIME]

KAPAN "THERMAL DIFFUSIVITY ANALYSIS" (CM**2/SEC)
 +CONDE "ELECTRON HEAT DIFFUSIVITY"
 +CONDEPR "chi(e) predictive model"
 +CONDI "ION HEAT DIFFUSIVITY"
 +CONDIPR "chi(i) predictive model"
 [VS. x"r/a" bdy AND TIME]

MFLUX "MAGNETIC FLUXES" (WEBERS)
 +PLFLX2PI "TOTAL POLOIDAL FLUX"
 +TRFLX "TOROIDAL FLUX"
 [VS. x"r/a" bdy AND TIME]

MGBAL "MAGDIF ENERGY BALANCE" (WATTS/CM3)

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-POH          "OHMIC HEATING POWER"
+UDEXB        "E CROSS B POWER"
-UBPDT        "D/DT(POLOIDAL FIELD ENERGY)"
+UBCMP        "B(POL) COMPRESSION"
+UMGBA        "MAGDIF ENERGY BALANCE"
-POHB         "POWER: OH CIRCUIT TO FAST IONS"
              [VS. x"r/a" ctr AND TIME]

MMM_FR        "MMM95 FREQUENCY (MODE 1 & 2)" (RAD/SEC)
+OMEMMM1      "MMM95 FREQUENCY MODE=1"
+OMEMMM2      "MMM95 FREQUENCY MODE=2"
              [VS. x"r/a" bdy AND TIME]

MMM_GR        "MMM95 GROWTH RATES (MODE 1 & 2)" (1/SEC)
+GAMMMM1      "MMM95 GRTH RATE MODE=1"
+GAMMMM2      "MMM95 GRTH RATE MODE=2"
              [VS. x"r/a" bdy AND TIME]

MMM_V         "MMM95 CONVECTIVE VELOCITIES" (CM/SEC)
+VCONIMMM     "MMM95 MODEL ION CONV. VEL."
+VCONEMMM     "MMM95 MODEL ELEC. CONV. VEL."
+VCONZMMM     "MMM95 MODEL IMP. CONV. VEL."
              [VS. x"r/a" bdy AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

MOBAL         "ANGULAR MOMENTUM BALANCE" (Nt-M/CM3)
-MODOT        "MOMENTUM GAIN"
-MONET        "NET CX MOMENTUM LOSS"
-MVISC        "VISCOUS TRANSPORT"
-MCONV        "CONVECTIVE TRANSPORT"
+TQIN         "TOTAL INPUT TORQUE"
+PHBAL        "ANGULAR MOMENTUM BALANCE"
              [VS. x"r/a" ctr AND TIME]

MOBALI        "INPUT TORQUES" (Nt-M/CM3)
+TQBCO        "BEAM COLLISIONAL TORQUE"
+TQRPL        "BEAM RPL JXB TORQUE"
+TQBTH        "BEAM THERMALIZATION TORQUE"
+TQJXB        "BEAM JXB TORQUE"
+TQIN         "TOTAL INPUT TORQUE"
              [VS. x"r/a" ctr AND TIME]

MOI           "ANGULAR INERTIA DENSITY" (NtMS2/CM3)
+AMOI         "Total Therm Ang Inertia Dens"
+MOIG_H       "H Therm Ang Inertia Dens"
+MOIG_D       "D Therm Ang Inertia Dens"
+MOIG_X       "Impurity Therm Ang Inertia Dens"
              [VS. x"r/a" ctr AND TIME]

MOI_IMP       "IMPURITY ANGULAR INERTIA DENSITY" (NtMS2/CM3)
+MOIG_X       "Impurity Therm Ang Inertia Dens"
+MOIS_TOK     "TOK Therm Ang Inertia Dens"
              [VS. x"r/a" ctr AND TIME]

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MPMHD "PLASMA PRESSURE to MHD SOLVER" (PASCALS)
 +PMHD_IN "PRESSURE INPUT to MHD SOLVER"
 +PMHDT_IN "THERMAL PRESSURE to MHD SOLVER"
 +PMHDR_IN "ROTATION PRESSURE to MHD SOLVER"
 +PMHDF_IN "NONTHERMAL PRESS to MHD SOLVER"
 [VS. x"r/a" ctr AND TIME]

N0BAL "NEUTRAL PTCL BALANCE (E-)" (N/CM3/SEC)
 -BALN0 "BALANCE CHECK"
 +S0VOL "TOTAL NEUTRAL VOL E-SCE"
 +FLX0I "DIV(NEUTRAL INFLUX)"
 -FLX0X "DIV(NEUTRAL OUTFLUX)"
 -SFETO "ELECTRONS -> FAST NEUTRALS"
 -SCEE "ELECTRON SOURCE (TH.NEUTRALS)"
 [VS. x"r/a" ctr AND TIME]

N0BAL_AGF "gas flow neutral ptcl bal all" (N/CM3/SEC)
 -SEGF_H "H gas flow electron source"
 -SFCXGF_H "H gas (e-)=> FAST ION CX"
 -FLX0_GF_H "H DIV(gas (e-) NEUTRAL FLUX)"
 -BALN0_GF_H "H gas (e-) NEUTRAL PTCL BAL."
 -SEGF_D "D gas flow electron source"
 -SFCXGF_D "D gas (e-)=> FAST ION CX"
 -FLX0_GF_D "D DIV(gas (e-) NEUTRAL FLUX)"
 -BALN0_GF_D "D gas (e-) NEUTRAL PTCL BAL."
 [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

N0BAL_ARC "recyc neutral ptcl bal all" (N/CM3/SEC)
 -SERC_H "H recyc electron source"
 -SFCXRC_H "H recyc (e-)=> FAST ION CX"
 -FLX0_RC_H "H DIV(recyc (e-) NEUTRAL FLUX)"
 -BALN0_RC_H "H recyc (e-) NEUTRAL PTCL BAL."
 -SERC_D "D recyc electron source"
 -SFCXRC_D "D recyc (e-)=> FAST ION CX"
 -FLX0_RC_D "D DIV(recyc (e-) NEUTRAL FLUX)"
 -BALN0_RC_D "D recyc (e-) NEUTRAL PTCL BAL."
 [VS. x"r/a" ctr AND TIME]

N0BAL_HALO "Beam Halo neutral ptcl balance" (N/CM3/SEC)
 +S0HALO "TOTAL (e-) in HALO NEUTRAL SCE"
 -SEHALO "(e-) RECAP in HALO ION SCEs"
 -SFCXHALO "HALO NEUTRALS (e-)=> FAST ION CX"
 -FLX0_HALO "DIV(HALO (e-) NEUTRAL FLUX)"
 -BALN0_HALO "HALO (e-) NEUTRAL PTCL BALANCE"
 [VS. x"r/a" ctr AND TIME]

N0BAL_SGF "gas flow neutral ptcl bal sum" (N/CM3/SEC)
 -SESGF "gas flow electron source"
 -SFCXSGF "gas flow (e-)=> FAST ION CX"
 -FLX0_SGF "DIV(gas flow (e-) NEUTRAL FLUX)"
 -BALN0_SGF "gas flow (e-) NEUTRAL PTCL BAL."

[VS. x"r/a" ctr AND TIME]

N0BAL_SRC "recyc neutral ptcl bal sum" (N/CM3/SEC)
-SESRC "recycling electron source"
-SFCXSRC "recycling (e-)=> FAST ION CX"
-FLX0_SRC "DIV(recycling (e-) NEUTRAL FLUX)"
-BALN0_SRC "recycling (e-) NEUTRAL PTCL BAL."
[VS. x"r/a" ctr AND TIME]

NB01 "Beam#01(D) densities" (N/CM**3)
+NB01_TOT "nb: Beam#01(D), total density"
+NB01_E1 "nb: Beam#01(D), E-fraction no.1"
+NB01_E2 "nb: Beam#01(D), E-fraction no.2"
+NB01_E3 "nb: Beam#01(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

NB02 "Beam#02(D) densities" (N/CM**3)
+NB02_TOT "nb: Beam#02(D), total density"
+NB02_E1 "nb: Beam#02(D), E-fraction no.1"
+NB02_E2 "nb: Beam#02(D), E-fraction no.2"
+NB02_E3 "nb: Beam#02(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

NB03 "Beam#03(D) densities" (N/CM**3)
+NB03_TOT "nb: Beam#03(D), total density"
+NB03_E1 "nb: Beam#03(D), E-fraction no.1"
+NB03_E2 "nb: Beam#03(D), E-fraction no.2"
+NB03_E3 "nb: Beam#03(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

NB04 "Beam#04(D) densities" (N/CM**3)
+NB04_TOT "nb: Beam#04(D), total density"
+NB04_E1 "nb: Beam#04(D), E-fraction no.1"
+NB04_E2 "nb: Beam#04(D), E-fraction no.2"
+NB04_E3 "nb: Beam#04(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

NB05 "Beam#05(D) densities" (N/CM**3)
+NB05_TOT "nb: Beam#05(D), total density"
+NB05_E1 "nb: Beam#05(D), E-fraction no.1"
+NB05_E2 "nb: Beam#05(D), E-fraction no.2"
+NB05_E3 "nb: Beam#05(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

NB06 "Beam#06(D) densities" (N/CM**3)
+NB06_TOT "nb: Beam#06(D), total density"
+NB06_E1 "nb: Beam#06(D), E-fraction no.1"
+NB06_E2 "nb: Beam#06(D), E-fraction no.2"
+NB06_E3 "nb: Beam#06(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

NB_F_D "D Beam ion density by E.fraction" (N/CM**3)

+NB_F1_D "density: full energy D beam"
 +NB_F2_D "density: half energy D beam"
 +NB_F3_D "density: 1/3 energy D beam"
 [VS. x"r/a" ctr AND TIME]

NCFKI "FITS TO NEOCLASSICAL KAPA(I)" (CM**2/SEC)
 +CONDIWNC "NCLASS ion heat diffusivity"
 +CONDICWNC "NCLASS ion class heat diffus"
 +FKJUL "CHI(I) NC RUTHERFORD-JULICH: TRANSP"
 +FKHZH "CHI(I) NC HAZELTINE-HINTON: TRANSP"
 +FKBOL "CHI(I) NC BOLTON: TRANSP"
 +FKCHH "CHI(I) NC CHANG-HINTON ORIGINAL: TRANSP"
 +FKCH2 "CHI(I) NC CHANG-HINTON VSN 2: TRANSP"
 +FKCHZ "CHI(I) NC CHANG-HINTON Z-CORR: TRANSP"
 +XETI0 "CHI(ETA(I)) RAW"
 +CONDI "ION HEAT DIFFUSIVITY"
 [VS. x"r/a" bdy AND TIME]

NCFKI_B "NC KAPA(I) BOLTON FITS" (CM**2/SEC)
 +FKBOL "CHI(I) NC BOLTON: TRANSP"
 +FKBOL_K1 "CHI(I) NC BOLTON: KAPISN_1"
 +FKBOL_K0 "CHI(I) NC BOLTON: KAPISN_0"
 [VS. x"r/a" bdy AND TIME]

NCFKI_CH "NC KAPA(I) Chang-Hinton FITS" (CM**2/SEC)
 +FKCHH "CHI(I) NC CHANG-HINTON ORIGINAL: TRANSP"
 +FKCHH_K1 "CHI(I) NC CHANG-HINTON ORIGINAL: KAPISN_1"
 +FKCHH_K0 "CHI(I) NC CHANG-HINTON ORIGINAL: KAPISN_0"
 [VS. x"r/a" bdy AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

NCFKI_CH2 "NC KAPA(I) Chang-Hinton FITS v2" (CM**2/SEC)
 +FKCH2 "CHI(I) NC CHANG-HINTON VSN 2: TRANSP"
 +FKCH2_K1 "CHI(I) NC CHANG-HINTON VSN 2: KAPISN_1"
 +FKCH2_K0 "CHI(I) NC CHANG-HINTON VSN 2: KAPISN_0"
 [VS. x"r/a" bdy AND TIME]

NCFKI_CHZ "NC KAPA(I) Chang-Hinton FITS Z-corr" (CM**2/SEC)
 +FKCHZ "CHI(I) NC CHANG-HINTON Z-CORR: TRANSP"
 +FKCHZ_K1 "CHI(I) NC CHANG-HINTON Z-CORR: KAPISN_1"
 +FKCHZ_K0 "CHI(I) NC CHANG-HINTON Z-CORR: KAPISN_0"
 [VS. x"r/a" bdy AND TIME]

NCFKI_HH "NC KAPA(I) Hazeltine-Hinton FITS" (CM**2/SEC)
 +FKHZH "CHI(I) NC HAZELTINE-HINTON: TRANSP"
 +FKHZH_K1 "CHI(I) NC HAZELTINE-HINTON: KAPISN_1"
 +FKHZH_K0 "CHI(I) NC HAZELTINE-HINTON: KAPISN_0"
 [VS. x"r/a" bdy AND TIME]

NCFKI_KAP "NC KAPA(I) KAPISN FITS (istringer=1)" (CM**2/SEC)
 +FKJUL_K1 "CHI(I) NC RUTHERFORD-JULICH: KAPISN_1"
 +FKHZH_K1 "CHI(I) NC HAZELTINE-HINTON: KAPISN_1"
 +FKBOL_K1 "CHI(I) NC BOLTON: KAPISN_1"

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+FKCHH_K1  "CHI(I) NC CHANG-HINTON ORIGINAL: KAPISN_1"
+FKCH2_K1  "CHI(I) NC CHANG-HINTON VSN 2: KAPISN_1"
+FKCHZ_K1  "CHI(I) NC CHANG-HINTON Z-CORR: KAPISN_1"
          [VS. x"r/a" bdy AND TIME]

NCFKI_RJ   "NC KAPA(I) RUTHERFORD-JULICH FITS" (CM**2/SEC)
+FKJUL     "CHI(I) NC RUTHERFORD-JULICH: TRANSP"
+FKJUL_K1  "CHI(I) NC RUTHERFORD-JULICH: KAPISN_1"
+FKJUL_K0  "CHI(I) NC RUTHERFORD-JULICH: KAPISN_0"
          [VS. x"r/a" bdy AND TIME]

NCFTS      "Neoclassical trapping fractions" ( )
+NCFTMINUS "NC trapping fraction lower limit"
+NCFTPLUS  "NC trapping fraction upper limit"
+NCFT      "NC trapping fraction (net)"
          [VS. x"r/a" ctr AND TIME]

NCSQUEEZ   "NC ORBIT SQUEEZING FACTORS" ( )
+SQZE_NC   "NC electron orbit squeezing"
+SQZX_NC   "NC impurity orbit squeezing"
+SQZH_NC   "NC H+ orbit squeezing"
+SQZD_NC   "NC D+ orbit squeezing"
          [VS. x"r/a" ctr AND TIME]

NECOM      "NE DATA INPUT" (n/cm**3)
+NER_USE   "NER data as used"
+NER_IN    "NER data as input"
          [VS. MAJOR RADII (DATA MAPPING) AND TIME]

NERCOM     "NER data map check" (n/cm**3)
+NER_USE   "NER data as used"
+NER_IN    "NER data as input"
          [VS. MAJOR RADII (DATA MAPPING) AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

NETWD      "NE DATA PROFILE ASYMMETRY" (N/CM**3)
+NE        "ELECTRON DENSITY"
+NETW      "NE(R) ASSYMMETRY"
          [VS. x"r/a" ctr AND TIME]

NMC        "Monte Carlo Ion Count Profiles" (N)
+NMC_D     "Beam D No. of MC Ions"
          [VS. x"r/a" ctr AND TIME]

OM0HALO    "Beam halo ang. velocities" (RAD/SEC)
+OM0BH_H   "beam halo n0 ang. veloc. G=H"
+OM0BH_D   "beam halo n0 ang. veloc. G=D"
          [VS. x"r/a" ctr AND TIME]

OMEG0      "THERMAL NEUTRAL ANG.VELOCITIES" (RAD/SEC)
+OM0VD     "VOL NEUTRAL ANG.VEL G=D"
+OM0WD     "WALL NEUTRAL ANG.VEL G=D"
+OM0VH     "VOL NEUTRAL ANG.VEL G=H"

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+OM0WH      "WALL NEUTRAL ANG.VEL G=H"
            [VS. x"r/a" ctr AND TIME]

OMEG0AGF    "all gas flow ang. velocities" (RAD/SEC)
+OM0GF_H_H  "H omega0 due to H gas flow"
+OM0GF_D_H  "D omega0 due to H gas flow"
+OM0GF_H_D  "H omega0 due to D gas flow"
+OM0GF_D_D  "D omega0 due to D gas flow"
            [VS. x"r/a" ctr AND TIME]

OMEG0ARC    "all recyc ang. velocities" (RAD/SEC)
+OM0RC_H_H  "H omega0 due to H recyc"
+OM0RC_D_H  "D omega0 due to H recyc"
+OM0RC_H_D  "H omega0 due to D recyc"
+OM0RC_D_D  "D omega0 due to D recyc"
            [VS. x"r/a" ctr AND TIME]

OMEG0CX     "CX angular velocities" (RAD/SEC)
+OM0CX_GFH  "CX ANG. VELOC. gas flow H"
+OM0CX_GFD  "CX ANG. VELOC. gas flow D"
+OM0CX_RCH  "CX ANG. VELOC. recyc. H"
+OM0CX_RCD  "CX ANG. VELOC. recyc. D"
            [VS. x"r/a" ctr AND TIME]

OMEGS       "PLASMA ANGULAR VELOCITIES" (RAD/SEC)
+OMEGA      "TOROIDAL ANGULAR VELOCITY"
+OMEGA_NC   "N.C. TOROIDAL ANGULAR VELOCITY"
+OMEGDATA   "Toroidal Ang.Velocity Data"
            [VS. x"r/a" ctr AND TIME]

OMEGSFI     "Avg Fast ion Angular Velocities" (RAD/SEC)
+OMEGB      "BEAM ION AVG ANG.VELOCITY"
+OMEGB_D    "D BEAM ION AVG ANG.VELOCITY"
            [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

OMGCOM      "OMG data map check" (rad/sec)
+OMG_USE    "OMG data as used"
+OMG_IN     "OMG data as input"
            [VS. MAJOR RADII (DATA MAPPING) AND TIME]

P0VOLSC     "Power in volume neutral sources" (WATTS/CM3)
+PBCX       "THERMAL ION LOSS, FAST ION CX"
+P0HALO     "HALO NEUTRAL SCE POWER"
            [VS. x"r/a" ctr AND TIME]

PBE01       "Beam#01(D) electon heating" (WATTS/CM3)
+PBE01_TOT  "Beam#01(D), electron heating"
+PBE01_E1   "Pbe: Beam#01(D), E-frac no.1"
+PBE01_E2   "Pbe: Beam#01(D), E-frac no.2"
+PBE01_E3   "Pbe: Beam#01(D), E-frac no.3"
            [VS. x"r/a" ctr AND TIME]

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PBE02 "Beam#02(D) electron heating" (WATTS/CM3)
+PBE02_TOT "Beam#02(D), electron heating"
+PBE02_E1 "Pbe: Beam#02(D), E-fraction no.1"
+PBE02_E2 "Pbe: Beam#02(D), E-fraction no.2"
+PBE02_E3 "Pbe: Beam#02(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

PBE03 "Beam#03(D) electron heating" (WATTS/CM3)
+PBE03_TOT "Beam#03(D), electron heating"
+PBE03_E1 "Pbe: Beam#03(D), E-fraction no.1"
+PBE03_E2 "Pbe: Beam#03(D), E-fraction no.2"
+PBE03_E3 "Pbe: Beam#03(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

PBE04 "Beam#04(D) electron heating" (WATTS/CM3)
+PBE04_TOT "Beam#04(D), electron heating"
+PBE04_E1 "Pbe: Beam#04(D), E-fraction no.1"
+PBE04_E2 "Pbe: Beam#04(D), E-fraction no.2"
+PBE04_E3 "Pbe: Beam#04(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

PBE05 "Beam#05(D) electron heating" (WATTS/CM3)
+PBE05_TOT "Beam#05(D), electron heating"
+PBE05_E1 "Pbe: Beam#05(D), E-fraction no.1"
+PBE05_E2 "Pbe: Beam#05(D), E-fraction no.2"
+PBE05_E3 "Pbe: Beam#05(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

PBE06 "Beam#06(D) electron heating" (WATTS/CM3)
+PBE06_TOT "Beam#06(D), electron heating"
+PBE06_E1 "Pbe: Beam#06(D), E-fraction no.1"
+PBE06_E2 "Pbe: Beam#06(D), E-fraction no.2"
+PBE06_E3 "Pbe: Beam#06(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

PBENB "the electron heating/beam power" (WATTS/CM3)
+PBE01_TOT "Beam#01(D), electron heating"
+PBE02_TOT "Beam#02(D), electron heating"
+PBE03_TOT "Beam#03(D), electron heating"
+PBE04_TOT "Beam#04(D), electron heating"
+PBE05_TOT "Beam#05(D), electron heating"
+PBE06_TOT "Beam#06(D), electron heating"
[VS. x"r/a" ctr AND TIME]

PBI01 "Beam#01(D) ion heating" (WATTS/CM3)
+PBI01_TOT "Beam#01(D), ion heating"
+PBI01_E1 "Pbi: Beam#01(D), E-fraction no.1"
+PBI01_E2 "Pbi: Beam#01(D), E-fraction no.2"
+PBI01_E3 "Pbi: Beam#01(D), E-fraction no.3"
[VS. x"r/a" ctr AND TIME]

PBI02 "Beam#02(D) ion heating" (WATTS/CM3)

+PBI02_TOT "Beam#02(D), ion heating"
+PBI02_E1 "Pbi: Beam#02(D), E-frac no.1"
+PBI02_E2 "Pbi: Beam#02(D), E-frac no.2"
+PBI02_E3 "Pbi: Beam#02(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

PBI03 "Beam#03(D) ion heating" (WATTS/CM3)
+PBI03_TOT "Beam#03(D), ion heating"
+PBI03_E1 "Pbi: Beam#03(D), E-frac no.1"
+PBI03_E2 "Pbi: Beam#03(D), E-frac no.2"
+PBI03_E3 "Pbi: Beam#03(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

PBI04 "Beam#04(D) ion heating" (WATTS/CM3)
+PBI04_TOT "Beam#04(D), ion heating"
+PBI04_E1 "Pbi: Beam#04(D), E-frac no.1"
+PBI04_E2 "Pbi: Beam#04(D), E-frac no.2"
+PBI04_E3 "Pbi: Beam#04(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

PBI05 "Beam#05(D) ion heating" (WATTS/CM3)
+PBI05_TOT "Beam#05(D), ion heating"
+PBI05_E1 "Pbi: Beam#05(D), E-frac no.1"
+PBI05_E2 "Pbi: Beam#05(D), E-frac no.2"
+PBI05_E3 "Pbi: Beam#05(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

PBI06 "Beam#06(D) ion heating" (WATTS/CM3)
+PBI06_TOT "Beam#06(D), ion heating"
+PBI06_E1 "Pbi: Beam#06(D), E-frac no.1"
+PBI06_E2 "Pbi: Beam#06(D), E-frac no.2"
+PBI06_E3 "Pbi: Beam#06(D), E-frac no.3"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

PBINB "the ion heating/beam power" (WATTS/CM3)
+PBI01_TOT "Beam#01(D), ion heating"
+PBI02_TOT "Beam#02(D), ion heating"
+PBI03_TOT "Beam#03(D), ion heating"
+PBI04_TOT "Beam#04(D), ion heating"
+PBI05_TOT "Beam#05(D), ion heating"
+PBI06_TOT "Beam#06(D), ion heating"
[VS. x"r/a" ctr AND TIME]

PBL01 "Beam#01(D) heating power el+i+th" (WATTS/CM3)
+PBTOT01 "Beam#01(D), total power"
+PBE01_TOT "Beam#01(D), electron heating"
+PBI01_TOT "Beam#01(D), ion heating"
+PBTH01 "Beam#01(D), thermalization power"
[VS. x"r/a" ctr AND TIME]

PBL02 "Beam#02(D) heating power el+i+th" (WATTS/CM3)
+PBTOT02 "Beam#02(D), total power"

+PBE02_TOT "Beam#02(D), electron heating"
+PBI02_TOT "Beam#02(D), ion heating"
+PBTH02 "Beam#02(D), thermalization power"
[VS. x"r/a" ctr AND TIME]

PBL03 "Beam#03(D) heating power el+i+th" (WATTS/CM3)
+PBTOT03 "Beam#03(D), total power"
+PBE03_TOT "Beam#03(D), electron heating"
+PBI03_TOT "Beam#03(D), ion heating"
+PBTH03 "Beam#03(D), thermalization power"
[VS. x"r/a" ctr AND TIME]

PBL04 "Beam#04(D) heating power el+i+th" (WATTS/CM3)
+PBTOT04 "Beam#04(D), total power"
+PBE04_TOT "Beam#04(D), electron heating"
+PBI04_TOT "Beam#04(D), ion heating"
+PBTH04 "Beam#04(D), thermalization power"
[VS. x"r/a" ctr AND TIME]

PBL05 "Beam#05(D) heating power el+i+th" (WATTS/CM3)
+PBTOT05 "Beam#05(D), total power"
+PBE05_TOT "Beam#05(D), electron heating"
+PBI05_TOT "Beam#05(D), ion heating"
+PBTH05 "Beam#05(D), thermalization power"
[VS. x"r/a" ctr AND TIME]

PBL06 "Beam#06(D) heating power el+i+th" (WATTS/CM3)
+PBTOT06 "Beam#06(D), total power"
+PBE06_TOT "Beam#06(D), electron heating"
+PBI06_TOT "Beam#06(D), ion heating"
+PBTH06 "Beam#06(D), thermalization power"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

PBOLO "PRAD USED AND BOLOMETER DATA" (WATTS/CM3)
+PRAD "NET RADIATED POWER USED"
+PRADC "NET RADIATED POWER (THEORY)"
+PRAD0 "RADIATION: BOLO DATA"
+PRAD_ADJ "RADIATION: BOLO DATA ADJUSTED"
[VS. x"r/a" ctr AND TIME]

PBOLOS "PRAD CALCULATED BY SPECIES" (WATTS/CM3)
+PRADC "NET RADIATED POWER (THEORY)"
+PRADS_TOK "TOK Impurity Radiation"
[VS. x"r/a" ctr AND TIME]

PBSBR_TOK "PRAD BREM RAD FOR TOK" (WATTS/CM3)
+PRBS_TOK "TOK Impurity Brem Radiation"
[VS. x"r/a" ctr AND TIME]

PBSLI_TOK "PRAD LINE RAD FOR TOK" (WATTS/CM3)
+PRLS_TOK "TOK Impurity Line Radiation"
[VS. x"r/a" ctr AND TIME]

PBS_TOK "PRAD CALCULATED FOR TOK" (WATTS/CM3)
+PRADS_TOK "TOK Impurity Radiation"
+PRLS_TOK "TOK Impurity Line Radiation"
+PRBS_TOK "TOK Impurity Brem Radiation"
[VS. x"r/a" ctr AND TIME]

PBTHNB "the thermalization power" (WATTS/CM3)
+PBTH01 "Beam#01(D), thermalization power"
+PBTH02 "Beam#02(D), thermalization power"
+PBTH03 "Beam#03(D), thermalization power"
+PBTH04 "Beam#04(D), thermalization power"
+PBTH05 "Beam#05(D), thermalization power"
+PBTH06 "Beam#06(D), thermalization power"
[VS. x"r/a" ctr AND TIME]

PBTOTNB "the total/beam power" (WATTS/CM3)
+PBTOT01 "Beam#01(D), total power"
+PBTOT02 "Beam#02(D), total power"
+PBTOT03 "Beam#03(D), total power"
+PBTOT04 "Beam#04(D), total power"
+PBTOT05 "Beam#05(D), total power"
+PBTOT06 "Beam#06(D), total power"
[VS. x"r/a" ctr AND TIME]

PBX_SINGL "PRAD CALCULATED FOR SINGL" (WATTS/CM3)
+PRX_SINGL "SINGL Impurity Radiation"
+PRLX_SINGL "SINGL Impurity Line Radiation"
+PRBX_SINGL "SINGL Impurity Brem Radiation"
[VS. x"r/a" ctr AND TIME]

PB_F_D "D Beam heating by E.fraction" (WATTS/CM3)
+PBE_F1_D "Pbe: full energy D beam"
+PBE_F2_D "Pbe: half energy D beam"
+PBE_F3_D "Pbe: 1/3 energy D beam"
+PBI_F1_D "Pbi: full energy D beam"
+PBI_F2_D "Pbi: half energy D beam"
+PBI_F3_D "Pbi: 1/3 energy D beam"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

PCMPR "COMPRESSION POWERS" (WATTS/CM3)
+UBCMP "B(POL) COMPRESSION"
+PCPRB "POWER: COMPRESSION OF FAST IONS"
+PCMPE "ELECTRON COMPRESSION"
+PCMPI "ION COMPRESSION"
[VS. x"r/a" ctr AND TIME]

PCON "PTCL CONFINEMENT" (SECONDS)
+TAUPE "ELECTRON PTCL CONFINEMNT"
+TAPWE "ELECTRON TAU(P) WARE CORRECTION"
+TAUPD "D+ ION PTCL CONFINEMENT"
+TAUPH "H+ ION PTCL CONFINEMENT"

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+TAUPI      "ION PTCL CONFINEMENT"
            [VS. x"r/a" bdy AND TIME]

PCURFEQ     "FEQ PLASMA CURRENTS" (AMPS/CM2)
+CUR        "TOTAL PLASMA CURRENT"
            [VS. x"r/a" ctr AND TIME]

PCURN       "NC Bootstrap Cur Comparison" (AMPS/CM2)
+CURBS      "BOOTSTRAP CURRENT"
+CURBSWNC   "NCLASS Bootstrap Current"
+CURBSEPS   "Aspect Ratio Bootstrap Current"
+CURBSSAU   "Sauter Bootstrap Current"
            [VS. x"r/a" ctr AND TIME]

PCURS       "PLASMA CURRENTS" (AMPS/CM2)
+CUR        "TOTAL PLASMA CURRENT"
+CUROH      "OHMIC PLASMA CURRENT"
+CURQLIM    "CUR TO LIMIT Q (NON-PHYSICAL)"
+CURGP      "GRAD(P) TOROIDAL CUR"
+CURBS      "BOOTSTRAP CURRENT"
+CURB       "BEAM DRIVEN CURRENT"
            [VS. x"r/a" ctr AND TIME]

PCURSAU     "SAUTER BOOTSTRAP CURRENTS" (AMPS/CM2)
+CURBSSAU   "Sauter Bootstrap Current"
+CURBSNE    "Ne contrib Sauter Bootstrap Cur"
+CURBSTE    "Te contrib Sauter Bootstrap Cur"
+CURBSNI    "Ni contrib Sauter Bootstrap Cur"
+CURBSTI    "Ti contrib Sauter Bootstrap Cur"
            [VS. x"r/a" ctr AND TIME]

PCX_COEFF   "CX Power Coefficients" (WATTS/CM3/EV)
+CFPCX_GFH  "CX POWER COEFF. gas flow H"
+CFPCX_GFD  "CX POWER COEFF. gas flow D"
+CFPCX_RCH  "CX POWER COEFF. recyc. H"
+CFPCX_RCD  "CX POWER COEFF. recyc. D"
            [VS. x"r/a" ctr AND TIME]

PDENS       "PLASMA DENSITIES" (N/CM**3)
+BDENS      "BEAM ION DENSITY"
+NE         "ELECTRON DENSITY"
+ND         "DEUTERIUM ION DENSITY"
+NH         "HYDROGEN ION DENSITY"
+NIMP       "TOTAL IMPURITY DENSITY"
            [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

PDENS_NC    "NCLASS PLASMA DENSITIES" (N/CM**3)
+NE         "ELECTRON DENSITY"
+ND         "DEUTERIUM ION DENSITY"
+ND_NC      "NCLASS D+ ION DENSITY"
+NH         "HYDROGEN ION DENSITY"
+NH_NC      "NCLASS H+ ION DENSITY"

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+NIMP      "TOTAL IMPURITY DENSITY"
+NIMP_NC   "NCLASS impurity density"
           [VS. x"r/a" ctr AND TIME]

PDIFF      "PTCL DIFFUSIVITIES" (CM**2/SEC)
+DIFB      "ANOMOLOUS FAST ION DIFFUSIVITY"
+DIFFE     "ELEC PTCL DIFFUSIVITY"
+DIFWE     "ELEC PTCL DIFFUSIVITY (WARE)"
+DEINT     "INTOR ELECTRON DIFFUSIVITY"
+DIFFX     "EFF. IMP ION DIFFUSIVITY"
+DIFFD     "EFF. D+ ION DIFFUSIVITY"
+DIFFH     "EFF. H+ ION DIFFUSIVITY"
+DIFFI     "ION DIFFUSIVITY FROM TOTAL FLUX"
           [VS. x"r/a" bdy AND TIME]

PEFIS      "ELEC HEATING BY FAST ION SPECIES" (WATTS/CM3)
+PBE_D     "D BEAM->ELECTRON HEATING"
           [VS. x"r/a" ctr AND TIME]

PFUSN      "FUSION REACTION RATE PROFILES" (N/CM3/SEC)
+FTOTDT    "TOTAL D-T FUSION"
+FTOTDDN   "TOTAL D(D,N)HE3 FUSION"
+FTOT2TT   "TOTAL T(T,2N)HE4 FUSION"
+FTOTDDP   "TOTAL D(D,P)T FUSION"
           [VS. x"r/a" ctr AND TIME]

PHALO      "BEAM HALO POWERS" (WATTS/CM3)
+PSC_HALO  "beam halo source/sink power"
+PCX_HALO  "beam halo driven cx power"
           [VS. x"r/a" ctr AND TIME]

PIFIS      "ION HEATING BY FAST ION SPECIES" (WATTS/CM3)
+PBI_D     "D B->TH ION HEATING"
           [VS. x"r/a" ctr AND TIME]

PLABL      "PELLET ABLATION" (N/CM**3)
+PLABD     "PELLET ABLATION (DATA)"
           [VS. x"r/a" ctr AND TIME]

PLCUR      "POLOIDAL CURRENT TO BOUNDARY" (AMPS)
+PLCURPLL  "POLOIDAL CUR (J PLL)"
+PLCURPRP  "POLOIDAL CUR (J PERP)"
+PLCURTOT  "TOTAL POLOIDAL CUR TO WALL"
           [VS. x"r/a" bdy AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

PLJBS      "<J.B> PROFILES" (AMP*TESLA/CM2)
+PLJB      "<J.B> FLUX SURFACE VOL.AVG"
+PLJBXT    "<J.B> DRIVEN (SMOOTHED, USED)"
+PLJBXTU   "<J.B> DRIVEN (UNSMOOTHED)"
+PLJB0H    "<J.B> OHMIC"
+PLJB5NC   "<J.B> NCLASS Bootstrap"
+PLJBQLIM  "<J.B> TO LIMIT Q (NON-PHYSICAL)"

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[VS. x"r/a" ctr AND TIME]

PLJBXTS    "<J.B>ext sum & from resistivity"  (AMP*TESLA/CM2)
+PLJBXT    "<J.B> DRIVEN (SMOOTHED, USED)"
+PLJBXTR   "<J.B> DRIVEN, FROM RESISTIVITY"
[VS. x"r/a" ctr AND TIME]

PND_NC     "ND & NCLASS SMOOTHED ND"  (N/CM**3)
+ND        "DEUTERIUM ION DENSITY"
+ND_NC     "NCLASS D+ ION DENSITY"
[VS. x"r/a" ctr AND TIME]

PNH_NC     "NH & NCLASS SMOOTHED NH"  (N/CM**3)
+NH        "HYDROGEN ION DENSITY"
+NH_NC     "NCLASS H+ ION DENSITY"
[VS. x"r/a" ctr AND TIME]

PNTN2      "NEUTRON EMISSIVITIES"  (N/CM3/SEC)
+BBNT2_DD  "DD BEAM-BEAM NEUTRONS"
+BTNT2_DD  "DD BEAM-TARGET NEUTRONS"
[VS. 2d MC grid (x,th) AND TIME]

PNTN2_DD   "DD NEUTRON EMISSIVITIES"  (N/CM3/SEC)
+BBNT2_DD  "DD BEAM-BEAM NEUTRONS"
+BTNT2_DD  "DD BEAM-TARGET NEUTRONS"
[VS. 2d MC grid (x,th) AND TIME]

PNTNS      "NEUTRON EMISSIVITIES"  (N/CM3/SEC)
+BTNTX     "BEAM-TARGET NEUTRONS"
+BBNTX     "BEAM-BEAM NEUTRONS"
+THNTX     "THERMONUCLEAR NEUTRONS"
+TTNTX     "TOTAL NEUTRONS"
[VS. x"r/a" ctr AND TIME]

PNTNS_DD   "DD NEUTRON EMISSIVITIES"  (N/CM3/SEC)
+BBNTX_DD  "DD BEAM-BEAM NEUTRONS"
+BTNTX_DD  "DD BEAM-TARGET NEUTRONS"
+THNTX_DD  "DD THERMONUCLEAR NEUTRONS"
[VS. x"r/a" ctr AND TIME]

PNX_NC     "NX & NCLASS SMOOTHED NX"  (N/CM**3)
+NIMP      "TOTAL IMPURITY DENSITY"
+NIMP_NC   "NCLASS impurity density"
[VS. x"r/a" ctr AND TIME]

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PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

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PRESS      "PLASMA PRESSURE"  (PASCALS)
+PDATA     "P profile (Ufile data)"
+PMHD_SM   "Smooth Press given to MHD solver"
+PTOWB     "KINETIC MHD PRESSURE W/FAST IONS"
+PCHK      "P: Surf. Avg. Grad-Shaf Check"
+PPLAS     "PLASMA PRESSURE"
+PMHD_IN   "PRESSURE INPUT to MHD SOLVER"

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[VS. x"r/a" ctr AND TIME]

PRSCOM "PRS data map check" (Pascals)
+PRS_USE "PRS data as used"
+PRS_IN "PRS data as input"
[VS. MAJOR RADII (DATA MAPPING) AND TIME]

PRVEL "PTCL RADIAL VELOCITIES" (CM/SEC)
+VELE "ELECTRON RADIAL VELOCITY"
+VELB "ANOMOLOUS FAST ION VELOCITY"
+VELWE "ELECTRON WARE VELOCITY"
+VELIM "IMPURITY RADIAL VELOCITY"
+VELD "ION VELOCITY (NET) D+"
+VELH "ION VELOCITY (NET) H+"
[VS. x"r/a" bdy AND TIME]

PSFMTOT "NC Pfirsch-Schluter moments" (CM**-2)
+PSFM1 "NC Pfirsch-Schluter 1 moment"
+PSFM2 "NC Pfirsch-Schluter 2 moment"
+PSFM3 "NC Pfirsch-Schluter 3 moment"
+PSFM4 "NC Pfirsch-Schluter 4 moment"
+PSFM5 "NC Pfirsch-Schluter 5 moment"
+PSFM6 "NC Pfirsch-Schluter 6 moment"
+PSFM7 "NC Pfirsch-Schluter 7 moment"
+PSFM8 "NC Pfirsch-Schluter 8 moment"
+PSFM9 "NC Pfirsch-Schluter 9 moment"
+PSFM10 "NC Pfirsch-Schluter 10 moment"
+PSFM11 "NC Pfirsch-Schluter 11 moment"
[VS. x"r/a" ctr AND TIME]

PTEMP "PLASMA TEMPERATURES" (EV)
+TE "ELECTRON TEMPERATURE"
+TIPRO "MEASURED TI PROFILE"
+TI "ION TEMPERATURE"
[VS. x"r/a" ctr AND TIME]

PTEMP_NC "NCLASS PLASMA TEMPERATURES" (EV)
+TE "ELECTRON TEMPERATURE"
+TI "ION TEMPERATURE"
+TX "IMPURITY TEMPERATURE"
+TMJ "H/HE MAJORITY TEMPERATURE"
+TINC "NCLASS Ti (smoothed)"
+TMJNC "NCLASS majority Ti (smoothed)"
+TXNC "NCLASS impurity Ti (smoothed)"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

PTHFIS "P(THERM) BY FAST ION SPECIES" (WATTS/CM3)
+PBTH_D "D BEAM THERMALIZATION POWER"
[VS. x"r/a" ctr AND TIME]

PTI_NC "TI & NCLASS SMOOTHED TI" (EV)
+TI "ION TEMPERATURE"

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+TINC      "NCLASS Ti (smoothed)"
           [VS. x"r/a" ctr AND TIME]

PTMJ_NC    "TMJ & NCLASS SMOOTHED TMJ" (EV)
+TMJ       "H/HE MAJORITY TEMPERATURE"
+TMJNC     "NCLASS majority Ti (smoothed)"
           [VS. x"r/a" ctr AND TIME]

PTR_D      "D+ Ion Transport" (N/CM3/SEC)
+PTRD_MOD  "Div(D ion flux) (model)"
+PTRD_OBS  "Div(D ion flux) (observed)"
           [VS. x"r/a" ctr AND TIME]

PTR_H      "H+ Ion Transport" (N/CM3/SEC)
+PTRH_MOD  "Div(H ion flux) (model)"
+PTRH_OBS  "Div(H ion flux) (observed)"
           [VS. x"r/a" ctr AND TIME]

PTX_NC     "TX & NCLASS SMOOTHED TX" (EV)
+TX        "IMPURITY TEMPERATURE"
+TXNC     "NCLASS impurity Ti (smoothed)"
           [VS. x"r/a" ctr AND TIME]

QFL_NC     "NC Heat Transport" (WATTS/CM3)
+QFLNC_E   "div(NC heat flux) electrons"
+QFLNCC_E  "div(NC class heat flux) electr"
+QFLNC_X   "div(NC heat flux) impurity"
+QFLNCC_X  "div(NC class heat flux) impurity"
+QFLNC_I   "div(NC heat flux) thermal ions"
+QFLNCC_I  "div(NC class heat flux) thermals"
+QFLNC_D   "div(NC heat flux) thermal D+"
+QFLNC_H   "div(NC heat flux) thermal H+"
           [VS. x"r/a" ctr AND TIME]

QFL_NCD    "NC Heat Transport D+" (WATTS/CM3)
+QFLNC_D   "div(NC heat flux) thermal D+"
+QFLNCC_D  "div(NC class heat flux) D+"
           [VS. x"r/a" ctr AND TIME]

QFL_NCH    "NC Heat Transport H+" (WATTS/CM3)
+QFLNC_H   "div(NC heat flux) thermal H+"
+QFLNCC_H  "div(NC class heat flux) H+"
           [VS. x"r/a" ctr AND TIME]

QINTEGC    "Q integral wrt norm pol flux comparision" ( )
+QINTEG    "Q integral wrt norm pol flux"
           [VS. x"r/a" bdy AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

QP         "Q PROFILES" ( )
+QCHK      "MHD EQUILIBRIUM Q CHECK"
+Q         "Q PROFILE"
+QDATA     "Q profile (Ufile data)"

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+QMHD      "Q from MHD or FSP code"
+QMHD_SM   "Smooth Q given to MHD solver"
           [VS. x"r/a" bdy AND TIME]

QPRCOM     "QPR data map check"  ( )
+QPR_USE   "QPR data as used"
+QPR_IN    "QPR data as input"
           [VS. MAJOR RADII (DATA MAPPING) AND TIME]

ROBAL      "ROTATION POWER BALANCE" (WATTS/CM3)
-RODOT     "ROTATIONAL ENERGY GAIN"
-RONET     "CX ROTATIONAL ENERGY LOSS"
-RVISC     "VISCOUS ROT.ENERGY LOSS"
-RCONV     "CONVECTIVE ROT.ENERGY LOSS"
-RSFRC     "ROTATION SOURCE FRICTION"
+UPHIN     "TOTAL ROTATIONAL ENERGY INPUT"
+UPBAL     "ROTATIONAL ENERGY BALANCE"
           [VS. x"r/a" ctr AND TIME]

ROBALI     "ROTATIONAL ENERGY INPUTS" (WATTS/CM3)
+RQBCO     "BEAM WORK -> ROTATION (COL.)"
+RQBTH     "BEAM WORK -> ROTATION (THRMALIZ)"
+RQJXB     "BEAM WORK -> ROTATION (JXB)"
+RQRPL     "BEAM WORK -> ROTATION RPL (JXB)"
+RCMPR     "ROTATION COMPRESSION"
+UPHIN     "TOTAL ROTATIONAL ENERGY INPUT"
           [VS. x"r/a" ctr AND TIME]

RSNBI      "II rates with beam ions" (1/sec)
+RSNBI_H_D "H_0 ii sink by D beam ions"
+RSNBI_D_D "D_0 ii sink by D beam ions"
           [VS. x"r/a" ctr AND TIME]

RSNBX      "CX rates with beam ions" (1/sec)
+RSNBX_H_D "H_0 cx sink by D beam ions"
+RSNBX_D_D "D_0 cx sink by D beam ions"
           [VS. x"r/a" ctr AND TIME]

SEFIS      "ELEC SOURCES BY FAST ION SPECIES" (N/CM3/SEC)
+SBE_D     "ELECTRON SCE D BEAM DEPOSITION"
           [VS. x"r/a" ctr AND TIME]

SHALO      "BEAM HALO SCE/SINK" (N/CM3/SEC)
+SBCXH     "H_0 NEUTRAL SOURCE BEAM HALO"
+SIHALO_H  "BEAM HALO RECAP ION SCE G=H"
+SBCXD     "D_0 NEUTRAL SOURCE BEAM HALO"
+SIHALO_D  "BEAM HALO RECAP ION SCE G=D"
           [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

SINBN0     "FAST ION THERMAL NEUTRAL SINKS" (N/CM3/SEC)
+SB0XD     "D0 NEUTRAL SINK BEAM CX"
+SB0ID     "D0 NEUTRAL SINK BEAM II"

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+SB0XH      "H0 NEUTRAL SINK BEAM CX"
+SB0IH      "H0 NEUTRAL SINK BEAM II"
            [VS. x"r/a" ctr AND TIME]

SI_AGF      "all gas flow ion sources" (N/CM3/SEC)
+SIGF_H_H   "H ion sce from H gas flow"
+SIGF_D_H   "D ion sce from H gas flow"
+SIGF_H_D   "H ion sce from D gas flow"
+SIGF_D_D   "D ion sce from D gas flow"
            [VS. x"r/a" ctr AND TIME]

SI_ARC      "all recyc ion sources" (N/CM3/SEC)
+SIRC_H_H   "H ion sce from H recyc"
+SIRC_D_H   "D ion sce from H recyc"
+SIRC_H_D   "H ion sce from D recyc"
+SIRC_D_D   "D ion sce from D recyc"
            [VS. x"r/a" ctr AND TIME]

SNCXTOT_D   "total CX sink rate D" (N/CM3/SEC)
+SNCX_D     "CX sink rate beam D"
+SNCXMC_D   "MC CX sink rate beam D,orbit"
            [VS. x"r/a" ctr AND TIME]

SQPARM      "squareness parameters" ( )
+SQUARE_U0  "Flux surf upper outer squareness"
+SQUARE_LO  "Flux surf lower outer squareness"
            [VS. x"r/a" bdy AND TIME]

SREXB       "ExB Shearing Rates" (RAD/SEC)
+SREXB_NCL  "ExB shear rate (nclass,R>R_axis)"
+SREXBMOD   "ExB Shear Rate (transport model)"
+SREXB_A    "ExB Shear Rate (selected)"
+SREXBV1    "ExB Shear Rate (exbshear.f90)"
+SREXBV2    "ExB Shear Rate (exbshear2.f90)"
            [VS. x"r/a" bdy AND TIME]

SREXB_T     "ExB Shearing Rate Terms" (RAD/SEC)
+SREXBV2    "ExB Shear Rate (exbshear2.f90)"
+SREXBPHI   "ExB Shear Rate (V_tor)"
+SREXBTHI   "ExB Shear Rate (V_phi)"
+SREXBGRP   "ExB Shear Rate (dp/dr)"
            [VS. x"r/a" bdy AND TIME]

SSGF        "SUMMED GAS FLOW ION SCES" (N/CM3/SEC)
+SISGF_H    "gas flow ION SCE G=H"
+SISGF_D    "gas flow ION SCE G=D"
            [VS. x"r/a" ctr AND TIME]

SSRC        "SUMMED RECYCLING ION SCES" (N/CM3/SEC)
+SISRC_H    "recycling ION SCE G=H"
+SISRC_D    "recycling ION SCE G=D"
            [VS. x"r/a" ctr AND TIME]

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PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

STHFIS "THERMALIZATION BY F.I. SPECIES" (N/CM3/SEC)
+SBTH_D "D BEAM THERMALIZATION SOURCE"
[VS. x"r/a" ctr AND TIME]

T0 "THERMAL NEUTRAL TEMPERATURES" (EV)
+T0VD "VOL NEUTRAL TEMP G=D"
+T0WD "WALL NEUTRAL TEMP G=D"
+T0VH "VOL NEUTRAL TEMP G=H"
+T0WH "WALL NEUTRAL TEMP G=H"
[VS. x"r/a" ctr AND TIME]

T0AGF "all gas flow temperatures" (EV)
+T0GF_H_H "H T0 due to H gas flow"
+T0GF_D_H "D T0 due to H gas flow"
+T0GF_H_D "H T0 due to D gas flow"
+T0GF_D_D "D T0 due to D gas flow"
[VS. x"r/a" ctr AND TIME]

T0ARC "all recyc temperatures" (EV)
+T0RC_H_H "H T0 due to H recyc"
+T0RC_D_H "D T0 due to H recyc"
+T0RC_H_D "H T0 due to D recyc"
+T0RC_D_D "D T0 due to D recyc"
[VS. x"r/a" ctr AND TIME]

T0CX "CX neutral temperatures" (EV)
+T0CX_GFH "CX NEUTRAL TEMP. gas flow H"
+T0CX_GFD "CX NEUTRAL TEMP. gas flow D"
+T0CX_RCH "CX NEUTRAL TEMP. recyc. H"
+T0CX_RCD "CX NEUTRAL TEMP. recyc. D"
[VS. x"r/a" ctr AND TIME]

T0HALO "Beam halo neutral temps" (EV)
+T0BH_H "beam halo neutral temp G=H"
+T0BH_D "beam halo neutral temp G=D"
[VS. x"r/a" ctr AND TIME]

TAUPA "FAST ION P.A. SCATTERING TIMES" (SECONDS)
+TPA1A_D "D FULL E TAU(SCATTERING,CO)"
+TPA1B_D "D FULL E TAU(SCATTERING,CTR)"
[VS. x"r/a" ctr AND TIME]

TAUSL "FAST ION SLOWING DOWN TIMES" (SECONDS)
+TSL1A_D "D FULL E TAU(SLOWING DOWN,CO)"
+TSL1B_D "D FULL E TAU(SLOWING DOWN,CTR)"
[VS. x"r/a" ctr AND TIME]

TBPA_D "D BEAM PITCH ANGLE SCATTERING" (SECONDS)
+TPA1A_D "D FULL E TAU(SCATTERING,CO)"
+TPA2A_D "D HALF E TAU(SCATTERING,CO)"
+TPA3A_D "D 1/3 E TAU(SCATTERING,CO)"
+TPA1B_D "D FULL E TAU(SCATTERING,CTR)"
+TPA2B_D "D HALF E TAU(SCATTERING,CTR)"

+TPA3B_D "D 1/3 E TAU(SCATTERING,CTR)"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

TBSL_D "D BEAM SLOWING DOWN TIMES" (SECONDS)
+TSL1A_D "D FULL E TAU(SLOWING DOWN,CO)"
+TSL2A_D "D HALF E TAU(SLOWING DOWN,CO)"
+TSL3A_D "D 1/3 E TAU(SLOWING DOWN,CO)"
+TSL1B_D "D FULL E TAU(SLOWING DOWN,CTR)"
+TSL2B_D "D HALF E TAU(SLOWING DOWN,CTR)"
+TSL3B_D "D 1/3 E TAU(SLOWING DOWN,CTR)"
[VS. x"r/a" ctr AND TIME]

TCHK "TOROIDAL FLUX CHECK" (WEBERS)
+TRFLX "TOROIDAL FLUX"
+TRFCK "MHD TOROIDAL FLUX CHECK"
[VS. x"r/a" bdy AND TIME]

TCONS "CONFINEMENT TIMES" (SECONDS)
+TAUPE "ELECTRON PTCL CONFINEMNT"
+TAPWE "ELECTRON TAU(P) WARE CORRECTION"
+TEE "ELECTRON ENERGY CONFINEMENT"
+TAUPHI "MOMENTUM CONFINEMENT"
+TAUE "PLASMA ENERGY CONFINEMENT"
[VS. x"r/a" bdy AND TIME]

TCX_COEFF "CX Torque Coefficients" (Nt-M/CM3/(RAD/S))
+CFTCX_GFH "CX TORQUE COEFF. gas flow H"
+CFTCX_GFD "CX TORQUE COEFF. gas flow D"
+CFTCX_RCH "CX TORQUE COEFF. recyc. H"
+CFTCX_RCD "CX TORQUE COEFF. recyc. D"
[VS. x"r/a" ctr AND TIME]

TECOM "TE DATA INPUT" (eV)
+TER_USE "TER data as used"
+TER_IN "TER data as input"
[VS. MAJOR RADII (DATA MAPPING) AND TIME]

TERCOM "TER data map check" (eV)
+TER_USE "TER data as used"
+TER_IN "TER data as input"
[VS. MAJOR RADII (DATA MAPPING) AND TIME]

TESAW "SAWTOOTH DATA: TE" (EV)
+TE "ELECTRON TEMPERATURE"
[VS. x"r/a" ctr AND TIME]

TI2COM "TI2 data map check" (eV)
+TI2_USE "TI2 data as used"
+TI2_IN "TI2 data as input"
[VS. MAJOR RADII (DATA MAPPING) AND TIME]

TICOM "TI DATA INPUT" (eV)

+TI2_USE "TI2 data as used"
 +TI2_IN "TI2 data as input"
 [VS. MAJOR RADII (DATA MAPPING) AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

TMJS "MAJORITY TEMPERATURES" (EV)
 +TMJ "H/HE MAJORITY TEMPERATURE"
 +TMJSM "H/HE MAJORITY TEMP(SMOOTHED)"
 [VS. x"r/a" ctr AND TIME]

TQ0BA "NEUTRAL TORQUE BALANCE" (Nt-M/CM3)
 -TQBA0 "NEUTRAL TORQUE BALANCE"
 +TQ0VL "NEUTRAL VOL SCE TORQUE"
 -TQ0FL "DIV(neutral ANG.MOMENTUM FLUX)"
 +TQCX "CHARGE EXCHANGE TORQUE"
 -TQIZ "IONIZATION TORQUE"
 [VS. x"r/a" ctr AND TIME]

TQ0BA_AGF "gas flow neutral ang mo. bal all" (Nt-M/CM3)
 +TQCXGF_H "CX TORQUE TO H gas NEUTRALS"
 -TQIGF_H "H gas flow ionization TORQUE"
 -TQ0FLGF_H "H DIV(gas flow ANG.MO. FLUX)"
 -TQBA0_GF_H "H gas flow ANG.MO. BALANCE"
 +TQCXGF_D "CX TORQUE TO D gas NEUTRALS"
 -TQIGF_D "D gas flow ionization TORQUE"
 -TQ0FLGF_D "D DIV(gas flow ANG.MO. FLUX)"
 -TQBA0_GF_D "D gas flow ANG.MO. BALANCE"
 [VS. x"r/a" ctr AND TIME]

TQ0BA_ARC "recyc neutral ang mo. bal all" (Nt-M/CM3)
 +TQCXRC_H "CX TORQUE TO H recyc NEUTRALS"
 -TQIRC_H "H recyc ionization TORQUE"
 -TQ0FLRC_H "H DIV(recyc ANG.MO. FLUX)"
 -TQBA0_RC_H "H recyc ANG.MO. BALANCE"
 +TQCXRC_D "CX TORQUE TO D recyc NEUTRALS"
 -TQIRC_D "D recyc ionization TORQUE"
 -TQ0FLRC_D "D DIV(recyc ANG.MO. FLUX)"
 -TQBA0_RC_D "D recyc ANG.MO. BALANCE"
 [VS. x"r/a" ctr AND TIME]

TQ0BA_HALO "Beam Halo neutral ang mo. bal" (Nt-M/CM3)
 +TQ0HALO "HALO NEUTRAL SCE TORQUE"
 +TQCXHALO "CX TORQUE TO HALO NEUTRALS"
 -TQIHALO "HALO NEUTRAL RECAPTURE TORQUE"
 -TQ0FLHALO "DIV(HALO NEUTRAL ANG.MO. FLUX)"
 -TQBA0_HALO "HALO NEUTRAL ANG.MO. BALANCE"
 [VS. x"r/a" ctr AND TIME]

TQ0BA_SGF "gas flow neutral ang mo. bal sum" (Nt-M/CM3)
 +TQCXSGF "CX TORQUE TO gas flow NEUTRALS"
 -TQISGF "gas fl NEUTRAL ionization TORQUE"
 -TQ0FLSGF "DIV(gas fl NEUTRAL ANG.MO. FLUX)"
 -TQBA0_SGF "gas flow NEUTRAL ANG.MO. BALANCE"

[VS. x"r/a" ctr AND TIME]

TQ0BA_SRC "recyc neutral ang mo. bal sum" (Nt-M/CM3)
+TQCXSRC "CX TORQUE TO recyling NEUTRALS"
-TQISRC "recyc NEUTRAL ionization TORQUE"
-TQ0FLSRC "DIV(recyc NEUTRAL ANG.MO. FLUX)"
-TQBA0_SRC "recyling NEUTRAL ANG.MO. BALANCE"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

TQ0VOLSC "Torque in volume neutral sources" (Nt-M/CM3)
+TQBCX "BEAM CX ANTI-TORQUE"
+TQ0HALO "HALO NEUTRAL SCE TORQUE"
[VS. x"r/a" ctr AND TIME]

TQB01 "Beam#01(D) torque" (Nt-M/CM3)
+TQTOT01 "Beam#01(D) total torque"
+TQCOL01 "Beam#01(D) collisional torque"
+TQJB01 "Beam#01(D) JxB torque"
+TQTH01 "Beam#01(D) thermalization torque"
[VS. x"r/a" ctr AND TIME]

TQB02 "Beam#02(D) torque" (Nt-M/CM3)
+TQTOT02 "Beam#02(D) total torque"
+TQCOL02 "Beam#02(D) collisional torque"
+TQJB02 "Beam#02(D) JxB torque"
+TQTH02 "Beam#02(D) thermalization torque"
[VS. x"r/a" ctr AND TIME]

TQB03 "Beam#03(D) torque" (Nt-M/CM3)
+TQTOT03 "Beam#03(D) total torque"
+TQCOL03 "Beam#03(D) collisional torque"
+TQJB03 "Beam#03(D) JxB torque"
+TQTH03 "Beam#03(D) thermalization torque"
[VS. x"r/a" ctr AND TIME]

TQB04 "Beam#04(D) torque" (Nt-M/CM3)
+TQTOT04 "Beam#04(D) total torque"
+TQCOL04 "Beam#04(D) collisional torque"
+TQJB04 "Beam#04(D) JxB torque"
+TQTH04 "Beam#04(D) thermalization torque"
[VS. x"r/a" ctr AND TIME]

TQB05 "Beam#05(D) torque" (Nt-M/CM3)
+TQTOT05 "Beam#05(D) total torque"
+TQCOL05 "Beam#05(D) collisional torque"
+TQJB05 "Beam#05(D) JxB torque"
+TQTH05 "Beam#05(D) thermalization torque"
[VS. x"r/a" ctr AND TIME]

TQB06 "Beam#06(D) torque" (Nt-M/CM3)
+TQTOT06 "Beam#06(D) total torque"
+TQCOL06 "Beam#06(D) collisional torque"

+TQJB06 "Beam#06(D) JxB torque"
+TQTH06 "Beam#06(D) thermalization torque"
[VS. x"r/a" ctr AND TIME]

TQCOLNB "the total collisional torque" (Nt-M/CM3)
+TQCOL01 "Beam#01(D) collisional torque"
+TQCOL02 "Beam#02(D) collisional torque"
+TQCOL03 "Beam#03(D) collisional torque"
+TQCOL04 "Beam#04(D) collisional torque"
+TQCOL05 "Beam#05(D) collisional torque"
+TQCOL06 "Beam#06(D) collisional torque"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

TQHALO "BEAM HALO TORQUES" (Nt-M/CM3)
+TQSC_HALO "beam halo source/sink torque"
+TQCX_HALO "beam halo driven cx torque"
[VS. x"r/a" ctr AND TIME]

TQJBNB "the total/beam JxB torque" (Nt-M/CM3)
+TQJB01 "Beam#01(D) JxB torque"
+TQJB02 "Beam#02(D) JxB torque"
+TQJB03 "Beam#03(D) JxB torque"
+TQJB04 "Beam#04(D) JxB torque"
+TQJB05 "Beam#05(D) JxB torque"
+TQJB06 "Beam#06(D) JxB torque"
[VS. x"r/a" ctr AND TIME]

TQJBNBD "the dep/beam JxB torque" (Nt-M/CM3)
+TQJBD01 "Beam#01(D) JxB torque"
+TQJBD02 "Beam#02(D) JxB torque"
+TQJBD03 "Beam#03(D) JxB torque"
+TQJBD04 "Beam#04(D) JxB torque"
+TQJBD05 "Beam#05(D) JxB torque"
+TQJBD06 "Beam#06(D) JxB torque"
+TQJBD "BEAM DEP. JXB TORQUE"
[VS. x"r/a" ctr AND TIME]

TQJXBD "BEAM TOT. JXB TORQUE" (Nt-M/CM3)
+TQJXBT "BEAM JXB TORQUE"
+TQJBD "BEAM DEP. JXB TORQUE"
[VS. x"r/a" ctr AND TIME]

TQJXBD01 "Beam#01(D) JxB torque" (Nt-M/CM3)
+TQJB01 "Beam#01(D) JxB torque"
+TQJBD01 "Beam#01(D) JxB torque"
[VS. x"r/a" ctr AND TIME]

TQJXBD02 "Beam#02(D) JxB torque" (Nt-M/CM3)
+TQJB02 "Beam#02(D) JxB torque"
+TQJBD02 "Beam#02(D) JxB torque"
[VS. x"r/a" ctr AND TIME]

TQJXBD03 "Beam#03(D) JxB torque" (Nt-M/CM3)
+TQJB03 "Beam#03(D) JxB torque"
+TQJBD03 "Beam#03(D) JxB torque"
[VS. x"r/a" ctr AND TIME]

TQJXBD04 "Beam#04(D) JxB torque" (Nt-M/CM3)
+TQJB04 "Beam#04(D) JxB torque"
+TQJBD04 "Beam#04(D) JxB torque"
[VS. x"r/a" ctr AND TIME]

TQJXBD05 "Beam#05(D) JxB torque" (Nt-M/CM3)
+TQJB05 "Beam#05(D) JxB torque"
+TQJBD05 "Beam#05(D) JxB torque"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

TQJXBD06 "Beam#06(D) JxB torque" (Nt-M/CM3)
+TQJB06 "Beam#06(D) JxB torque"
+TQJBD06 "Beam#06(D) JxB torque"
[VS. x"r/a" ctr AND TIME]

TQTHNB "the total thermalization torque" (Nt-M/CM3)
+TQTH01 "Beam#01(D) thermalization torque"
+TQTH02 "Beam#02(D) thermalization torque"
+TQTH03 "Beam#03(D) thermalization torque"
+TQTH04 "Beam#04(D) thermalization torque"
+TQTH05 "Beam#05(D) thermalization torque"
+TQTH06 "Beam#06(D) thermalization torque"
[VS. x"r/a" ctr AND TIME]

TQTOTNB "the total/beam torque" (Nt-M/CM3)
+TQTOT01 "Beam#01(D) total torque"
+TQTOT02 "Beam#02(D) total torque"
+TQTOT03 "Beam#03(D) total torque"
+TQTOT04 "Beam#04(D) total torque"
+TQTOT05 "Beam#05(D) total torque"
+TQTOT06 "Beam#06(D) total torque"
[VS. x"r/a" ctr AND TIME]

TRVEL "Generalized transport velocities" (CM/SEC)
+VELE "ELECTRON RADIAL VELOCITY"
+VMO_NET "Momentum v_rad used in run"
+VELIAV "density averaged ion radial velocity"
+VEL_TE "electron energy radial velocity"
+VEL_TI "ion energy radial velocity"
[VS. x"r/a" bdy AND TIME]

TSHAF "SHAFRANOV SHIFT: CODE & DATA" (CM)
+SSHAF "SHAFRANOV SHIFT"
+SSHAFDA "SHAFRANOV SHIFT (MHD DATA)"
[VS. x"r/a" bdy AND TIME]

UBCUR "UNSHIELDED BEAM CURRENTS" (AMPS/CM2)

+UCURB "UNSHIELDED BEAM CURRENT"
 +UJBCO "UNSHIELDED BEAM CUR (CO BEAMS)"
 +UJBCR "UNSHIELDED BEAM CUR (CTR BEAMS)"
 [VS. x"r/a" ctr AND TIME]

UBDOT "FIELD ENERGY GAIN" (WATTS/CM3)
 +UBTDT "D/DT(FIELD ENERGY)"
 +UBPDT "D/DT(POLOIDAL FIELD ENERGY)"
 [VS. x"r/a" ctr AND TIME]

UDENS "ENERGY DENSITY" (JLES/CM3)
 +UPHI "THERMAL PLASMA ROTATIONAL ENERGY"
 +UE "ELECTRON ENERGY DENSITY"
 +UTOTL "TOTAL ENERGY DENSITY"
 +UI "ION ENERGY DENSITY"
 +UFASTPP "FAST ION PERP ENERGY DENSITY"
 +UFASTPA "FAST ION PLL ENERGY DENSITY"
 [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

UDENSPA "FAST ION PLL ENERGY DENSITY" (JLES/CM3)
 +UBPAR "BEAM PLL ENERGY DENSITY"
 +UFASTPA "FAST ION PLL ENERGY DENSITY"
 [VS. x"r/a" ctr AND TIME]

UDENSPP "FAST ION PERP ENERGY DENSITY" (JLES/CM3)
 +UBPRP "BEAM PERP ENERGY DENSITY"
 +UFASTPP "FAST ION PERP ENERGY DENSITY"
 [VS. x"r/a" ctr AND TIME]

UPWIND "UPWIND ADJUSTMENT PARAMETERS" (
 +UPWIND_TE "Electron Energy Balance UPWIND ADJUST"
 +UPWIND_TI "Ion Energy Balance UPWIND ADJUST"
 +UPWIND_MO "Angular Momentum Balance UPWIND ADJUST"
 +UPWIND_D "D ION UPWIND ADJUST ACTIVATION"
 +UPWIND_H "H ION UPWIND ADJUST ACTIVATION"
 [VS. x"r/a" bdy AND TIME]

VBTORMP "FAST ION <Vtor>, GC on midplane" (CM/SEC)
 +VBTORAV_MP "FAST ION <Vtor>, GC on midplane"
 [VS. MIDPLANE-FLUX SURFACE RADII AND TIME]

VCHK "VOLTAGE CHECK" (VOLTS)
 +V "VOLTAGE"
 +VCHEK "VOLTAGE CHECK"
 +VPOH "VOLTAGE for POH calculation"
 +VISOZ "Loop voltage from isolver mapped to zones"
 [VS. x"r/a" ctr AND TIME]

VELBX "Fast ion anomalous velocity" (CM/SEC)
 +BVELBX_D "D anom beam ion velocity"
 [VS. x"r/a" bdy AND TIME]

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VISBP      "PROFILE VB LIGHT" (VB INTENS)
+VBRG      "VB PROFILE (CALCULATED)"
           [VS. x"r/a" ctr AND TIME]

VMO        "Momentum Advection Velocities" (CM/SEC)
+VMO_PBAL  "Momentum v_rad from ptcl-bal"
+VMO_DATA  "Momentum v_rad input data"
+VMO_PINCH "Momentum v_rad pinch term"
+VMO_THMOD "Momentum v_rad, transport model"
+VMO_NET   "Momentum v_rad used in run"
           [VS. x"r/a" bdy AND TIME]

VPB01      "Beam#01(D) vpl1.B profiles" (T*CM/SEC)
+VPB01_E1  "Vpl1*B: Beam no.01(D), E-fraction#1"
+VPB01_E2  "Vpl1*B: Beam no.01(D), E-fraction#2"
+VPB01_E3  "Vpl1*B: Beam no.01(D), E-fraction#3"
           [VS. x"r/a" ctr AND TIME]

VPB02      "Beam#02(D) vpl1.B profiles" (T*CM/SEC)
+VPB02_E1  "Vpl1*B: Beam no.02(D), E-fraction#1"
+VPB02_E2  "Vpl1*B: Beam no.02(D), E-fraction#2"
+VPB02_E3  "Vpl1*B: Beam no.02(D), E-fraction#3"
           [VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

VPB03      "Beam#03(D) vpl1.B profiles" (T*CM/SEC)
+VPB03_E1  "Vpl1*B: Beam no.03(D), E-fraction#1"
+VPB03_E2  "Vpl1*B: Beam no.03(D), E-fraction#2"
+VPB03_E3  "Vpl1*B: Beam no.03(D), E-fraction#3"
           [VS. x"r/a" ctr AND TIME]

VPB04      "Beam#04(D) vpl1.B profiles" (T*CM/SEC)
+VPB04_E1  "Vpl1*B: Beam no.04(D), E-fraction#1"
+VPB04_E2  "Vpl1*B: Beam no.04(D), E-fraction#2"
+VPB04_E3  "Vpl1*B: Beam no.04(D), E-fraction#3"
           [VS. x"r/a" ctr AND TIME]

VPB05      "Beam#05(D) vpl1.B profiles" (T*CM/SEC)
+VPB05_E1  "Vpl1*B: Beam no.05(D), E-fraction#1"
+VPB05_E2  "Vpl1*B: Beam no.05(D), E-fraction#2"
+VPB05_E3  "Vpl1*B: Beam no.05(D), E-fraction#3"
           [VS. x"r/a" ctr AND TIME]

VPB06      "Beam#06(D) vpl1.B profiles" (T*CM/SEC)
+VPB06_E1  "Vpl1*B: Beam no.06(D), E-fraction#1"
+VPB06_E2  "Vpl1*B: Beam no.06(D), E-fraction#2"
+VPB06_E3  "Vpl1*B: Beam no.06(D), E-fraction#3"
           [VS. x"r/a" ctr AND TIME]

VPB_F_D    "D Beam vpl1.B flow by E.fraction" (T*(cm/sec))
+VPB_F1_D  "Vpl1.B: full energy D beam"
+VPB_F2_D  "Vpl1.B: half energy D beam"
+VPB_F3_D  "Vpl1.B: 1/3 energy D beam"

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[VS. x"r/a" ctr AND TIME]

VPOLMP "POLOIDAL VELOCITIES ON MIDPLANE" (CM/SEC)
+VPOLE_NC "NC electron poloidal velocity"
+VPOLX_NC "NC impurity poloidal velocity"
+VPOL_AVG "NC avg poloidal velocity"
+VPOLH_NC "NC H+ poloidal velocity"
+VPOLD_NC "NC D+ poloidal velocity"
[VS. MIDPLANE-FLUX SURFACE RADII AND TIME]

VTORMP "TOROIDAL VELOCITIES ON MIDPLANE" (CM/SEC)
+VTORE_NC "NC electron toroidal velocity"
+VTORX_NC "NC impurity toroidal velocity"
+VTOR_AVG "momentum balance avg velocity"
+VTORH_NC "NC H+ toroidal velocity"
+VTORD_NC "NC D+ toroidal velocity"
+VTORX "impurity toroidal velocity data"
[VS. MIDPLANE-FLUX SURFACE RADII AND TIME]

WNMC "Monte Carlo Weight Profiles" (#ptcls)
+WNMC_D "Beam D No. of MC Ions"
[VS. x"r/a" ctr AND TIME]

XDENS "IMPURITY DENSITY" (N/CM**3)
+NIMP "TOTAL IMPURITY DENSITY"
+NIMPS_TOK "TOK Total Impurity Density"
[VS. x"r/a" ctr AND TIME]

PROFILE MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

XIMS_TOK "Impurity Density for TOK" (N/CM**3)
+NIMPS_TOK "TOK Total Impurity Density"
[VS. x"r/a" ctr AND TIME]

XIM_SINGL "Impurity Density for SINGL" (N/CM**3)
+NIMP_SINGL "SINGL Impurity Density"
[VS. x"r/a" ctr AND TIME]

XPTR "IMPURITY PTCL TRANSPORT" (N/CM3/SEC)
+XPTR_MOD "Div(impurity flux) (model)"
+XPTR_OBS "Div(impurity flux) (observed)"
[VS. x"r/a" ctr AND TIME]

ZEFF "Z-EFFECTIVE PROFILES" ()
+ZEFMD "MAGDIF ZEFF PROFILE"
+ZEFFP "PLASMA COMPOSITION ZEFF PROFILE"
+ZEFFI "ZEFF DATA (UNCONSTRAINED)"
[VS. x"r/a" ctr AND TIME]

ZIMP "Average Mult. Impurity Z" ()
+XZIMPJ "Zonal Avg Z of Impurity"
+ZIMPS_TOK "TOK Avg. Mult. Impurity Z"
[VS. x"r/a" ctr AND TIME]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

ABTRAP_D "D beam ion banana fractions" ()
+TRAPB0_D "D beam full E dep banana frac."
+TRAPB_D "D beam ions banana fraction"
[VS. TIME ONLY.]

ALPHA "MAGNETIC ALPHA COMPARISON" ()
+ALPC "MAG:ALPHA, CALCULATED"
[VS. TIME ONLY.]

APMHD "Psi of Equilibrium Points relative to machine axis"
(Wb/rad)
+PSI0_TR "Psi_poloidal(axis) in simulation"
+ABPMHD "PSI Boundary Point from Eq. relative to machine axis"
+AXPMHD1 "PSI of X Point 1 from Eq. relative to machine axis"
+AXPMHD2 "PSI of X Point 2 from Eq. relative to machine axis"
+AXPMHD3 "PSI of X Point 3 from Eq. relative to machine axis"
+AXPMHD4 "PSI of X Point 4 from Eq. relative to machine axis"
+AXPMHD5 "PSI of X Point 5 from Eq. relative to machine axis"
+AXPMHD6 "PSI of X Point 6 from Eq. relative to machine axis"
+AXPMHD7 "PSI of X Point 7 from Eq. relative to machine axis"
+AXPMHD8 "PSI of X Point 8 from Eq. relative to machine axis"
+PSI0_ISO "Psi_poloidal(axis) (isolver)"
[VS. TIME ONLY.]

BHEAT "HEATING BY FAST IONS" (WATTS)
+BPTI "BEAM POWER TO IONS"
+BPTE "BEAM POWER TO ELECTRONS"
+BPTH "FAST ION POWER THERMALIZED"
[VS. TIME ONLY.]

BHEAT_D "BEAM HEATING (D BEAMS)" (WATTS)
+BPTH_D "D BEAM POWER THERMALIZED"
+BPTI_D "D BEAM POWER TO IONS"
+BPTE_D "D BEAM POWER TO ELECTRONS"
[VS. TIME ONLY.]

BMCPU "CPU TIME USE: BEAM CODE" (HOURS)
+CPMCFI "CPU: MONTE CARLO FAST ION CODE"
+CPBDEP "CPU: FAST ION DEPOSITION"
+CPBMCINI "CPU: FAST ION MC TABLE SETUP"
+CPXPGL "CPU: xplasma load"
+CPBORB "CPU: FAST ION ORBIT + COLLISIONS"
+CPBOUT "CPU: FAST ION OUTPUT RENORM"
[VS. TIME ONLY.]

BMPLL "CPU TIME (MPI RUN): BEAM CODE" (HOURS)
+CPBMAX "MAX THREAD CPU TIME: NUBEAM"
+CPBMIN "MIN THREAD CPU TIME: NUBEAM"
+CPBROOT "ROOT THREAD CPU TIME: NUBEAM"
+WC_NUBEAM "WALL CLOCK TIME: NUBEAM"
[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

BPHBA "FAST ION MOMENTUM BALANCE" (NT-M)
 -BPHST "FI ROT. ANGULAR MOMENTUM GAIN"
 +BPHCK "FI ROT. BALANCE CHECK"
 +BIPHER "FI ORBIT TORQUE ERROR"
 +BPHDP "FI ROT. DEPOSITION"
 +BPHOH "FI ROT. FROM OH"
 -BPHW0 "FI ROT. NEUTRAL ESCAPE"
 -BPTH "FI ROT. THERMALIZATION"
 -BPHOR "FI ROT. ORBIT LOSS"
 -BPHXB "FI ROT. JXB TORQUE"
 -BPHCL "FI ROT. COLLISIONAL TORQUE"
 [VS. TIME ONLY.]

BPHBA_D "BEAM MOMENTUM BALANCE (D)" (NT-M)
 -BPHST_D "D BEAM: ANGULAR MOMENTUM GAIN"
 +BPHCK_D "D BEAM: BALANCE CHECK"
 +BIPHER_D "D BEAM ORBIT TORQUE ERROR"
 +BPHDP_D "D BEAM: DEPOSITION, ION point"
 +BPHOH_D "D BEAM: FROM OH"
 -BPHW0_D "D BEAM: NEUTRAL ESCAPE"
 -BPTH_D "D BEAM: THERMALIZATION"
 -BPHOR_D "D BEAM: ORBIT LOSS"
 -BPHXB_D "D BEAM: JXB TORQUE"
 -BPHDFB_D "D BEAM: ANOM.DIFF. TORQUE"
 -BPHCL_D "D BEAM: COLLISIONAL TORQUE"
 [VS. TIME ONLY.]

BPHBX "FAST ION CX MOMENTUM BALANCE" (NT-M)
 -BPHW0 "FI ROT. NEUTRAL ESCAPE"
 +BPHCX "FI ROT. CX LOSS"
 -BPHRC "FI ROT. CX RECAPTURE"
 [VS. TIME ONLY.]

BPHBX_D "BEAM CX MOMENTUM BALANCE (D)" (NT-M)
 -BPHW0_D "D BEAM: NEUTRAL ESCAPE"
 +BPHCX_D "D BEAM: CX LOSS"
 -BPHRC_D "D BEAM: CX RECAPTURE"
 [VS. TIME ONLY.]

BPHDEPB_D "the total D-beam injected momentum" (NT-M)
 +BPHINJS_D "DBEAM MOMENTUM INJECTED"
 -BPHSHIN_D "DBEAM SH_THRU MOMENTUM"
 -BPHDEP0_D "DBEAM DEPOSITED MOMENTUM, ION point"
 -BPHDEPGC_D "DBEAM DEPOSITED MOMENTUM, at GC"
 -BPHDPBA_D "DBEAM MOMENTUM, BALANCE CHECK"
 [VS. TIME ONLY.]

BPHIS "BEAM & FAST ION ANGULAR MOMENTA" (NT-M-SEC)
 +BPHI "FAST ION ANGULAR MOMENTUM"
 +BPHI_D "D BEAM ION ANGULAR MOMENTUM"
 [VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

BZXRCMP "BZXR COMPARISON" (TESLA*CM)
+BZXR "VACUUM FIELD "BZ*R""
+GRBA_DATA "(R*Bt) Ufile data at bdy"
[VS. TIME ONLY.]

CIRCURS "Equilibrium PF Circuit Currents" (A)
+KK_PF1AU "Current in pf1au circuit"
+KK_PF1CU "Current in pf1cu circuit"
+KK_PF2U "Current in pf2u circuit"
+KK_PF3U "Current in pf3u circuit"
+KK_PF5 "Current in pf5 circuit"
+KK_PF3L "Current in pf3l circuit"
+KK_PF2L "Current in pf2l circuit"
+KK_PF1CL "Current in pf1cl circuit"
+KK_PF1AL "Current in pf1al circuit"
[VS. TIME ONLY.]

COILCURS "Equilibrium PF Coil Currents" (A)
+CC_PF1AU "Current in pf1au coil from Eq."
+CC_PF1CU "Current in pf1cu coil from Eq."
+CC_PF2U "Current in pf2u coil from Eq."
+CC_PF3U "Current in pf3u coil from Eq."
+CC_PF5 "Current in pf5 coil from Eq."
+CC_PF3L "Current in pf3l coil from Eq."
+CC_PF2L "Current in pf2l coil from Eq."
+CC_PF1CL "Current in pf1cl coil from Eq."
+CC_PF1AL "Current in pf1al coil from Eq."
[VS. TIME ONLY.]

CPDIS "CPU TIME DISTRIBUTION" (HOURS)
+CPTIM "CPU TIME USED SO FAR"
+CPOUT "CPU TIME: OUTPUT SYSTEM"
+CPTRK "CPU TIME: STRAIGHT LINE TRACKER"
+CPLH "CPU TIME: JET LOWER HYBRID"
+CPGEOM "CPU TIME: FLUX SURFACE GEOMETRY"
+CPMCFI "CPU: MONTE CARLO FAST ION CODE"
+CPXPGL "CPU: xplasma load"
+CPSC0 "CPU: NEUTRAL TRANSPORT MODEL"
[VS. TIME ONLY.]

CPGEO "CPU TIME USE: MHD GEOMETRY" (HOURS)
+CPGEOM "CPU TIME: FLUX SURFACE GEOMETRY"
+CPMHDQ "CPU TIME: MHD EQUILIBRIUM"
+CPGEOCAL "CPU TIME: Flux Surf. Averages"
[VS. TIME ONLY.]

CPWALL "WALL CLOCK & CPU TIME" (HOURS)
+CPTIM "CPU TIME USED SO FAR"
+WALLTIME "Elapsed wall clock time"
[VS. TIME ONLY.]

CP_PF1AL "Coil Current pf1al Compare" (A)
+CC_PF1AL "Current in pf1al coil from Eq."
[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

CP_PF1AU "Coil Current pf1au Compare" (A)
+CC_PF1AU "Current in pf1au coil from Eq."
[VS. TIME ONLY.]

CP_PF1CL "Coil Current pf1cl Compare" (A)
+CC_PF1CL "Current in pf1cl coil from Eq."
[VS. TIME ONLY.]

CP_PF1CU "Coil Current pf1cu Compare" (A)
+CC_PF1CU "Current in pf1cu coil from Eq."
[VS. TIME ONLY.]

CP_PF2L "Coil Current pf2l Compare" (A)
+CC_PF2L "Current in pf2l coil from Eq."
[VS. TIME ONLY.]

CP_PF2U "Coil Current pf2u Compare" (A)
+CC_PF2U "Current in pf2u coil from Eq."
[VS. TIME ONLY.]

CP_PF3L "Coil Current pf3l Compare" (A)
+CC_PF3L "Current in pf3l coil from Eq."
[VS. TIME ONLY.]

CP_PF3U "Coil Current pf3u Compare" (A)
+CC_PF3U "Current in pf3u coil from Eq."
[VS. TIME ONLY.]

CP_PF5 "Coil Current pf5 Compare" (A)
+CC_PF5 "Current in pf5 coil from Eq."
[VS. TIME ONLY.]

CZIMP "Impurity Z Data Comparison" ()
+XZIMP "Avg Z of Impurity"
+XZIMPD "Avg Z of Impurity Data"
[VS. TIME ONLY.]

DFLX "PARA/DIAMAGNETIC FLUX" (WEBERS)
+DFLUX "COMPUTED DIAMAGNETIC FLUX"
[VS. TIME ONLY.]

DTGEQ "Equilibrium Timesteps" (SECONDS)
+DTG "TIMESTEP FOR GEOMETRY"
+DTMAXG "MAXIMUM TIMESTEP FOR GEOMETRY"
[VS. TIME ONLY.]

DTS "TIMESTEPS" (SECONDS)
+DT "ENERGY BALANCE TIMESTEP"

+DTG "TIMESTEP FOR GEOMETRY"
+DTSCE "TIMESTEP FOR SOURCES"
+DTPROFIL "TIME SPACING FOR PROFILE OUTPUT"
+DTSCALAR "TIME SPACING FOR SCALAR OUTPUT"
[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

EINJ01 "Beam#01(D) Injected Energies" (eV)
+EINJ01_E1 "Einj: beam#01(D), E-fraction#1"
+EINJ01_E2 "Einj: beam#01(D), E-fraction#2"
+EINJ01_E3 "Einj: beam#01(D), E-fraction#3"
+DINJ01_E1 "Einj RMS Var.: beam#01(D), E#1"
+DINJ01_E2 "Einj RMS Var.: beam#01(D), E#2"
+DINJ01_E3 "Einj RMS Var.: beam#01(D), E#3"
[VS. TIME ONLY.]

EINJ02 "Beam#02(D) Injected Energies" (eV)
+EINJ02_E1 "Einj: beam#02(D), E-fraction#1"
+EINJ02_E2 "Einj: beam#02(D), E-fraction#2"
+EINJ02_E3 "Einj: beam#02(D), E-fraction#3"
+DINJ02_E1 "Einj RMS Var.: beam#02(D), E#1"
+DINJ02_E2 "Einj RMS Var.: beam#02(D), E#2"
+DINJ02_E3 "Einj RMS Var.: beam#02(D), E#3"
[VS. TIME ONLY.]

EINJ03 "Beam#03(D) Injected Energies" (eV)
+EINJ03_E1 "Einj: beam#03(D), E-fraction#1"
+EINJ03_E2 "Einj: beam#03(D), E-fraction#2"
+EINJ03_E3 "Einj: beam#03(D), E-fraction#3"
+DINJ03_E1 "Einj RMS Var.: beam#03(D), E#1"
+DINJ03_E2 "Einj RMS Var.: beam#03(D), E#2"
+DINJ03_E3 "Einj RMS Var.: beam#03(D), E#3"
[VS. TIME ONLY.]

EINJ04 "Beam#04(D) Injected Energies" (eV)
+EINJ04_E1 "Einj: beam#04(D), E-fraction#1"
+EINJ04_E2 "Einj: beam#04(D), E-fraction#2"
+EINJ04_E3 "Einj: beam#04(D), E-fraction#3"
+DINJ04_E1 "Einj RMS Var.: beam#04(D), E#1"
+DINJ04_E2 "Einj RMS Var.: beam#04(D), E#2"
+DINJ04_E3 "Einj RMS Var.: beam#04(D), E#3"
[VS. TIME ONLY.]

EINJ05 "Beam#05(D) Injected Energies" (eV)
+EINJ05_E1 "Einj: beam#05(D), E-fraction#1"
+EINJ05_E2 "Einj: beam#05(D), E-fraction#2"
+EINJ05_E3 "Einj: beam#05(D), E-fraction#3"
+DINJ05_E1 "Einj RMS Var.: beam#05(D), E#1"
+DINJ05_E2 "Einj RMS Var.: beam#05(D), E#2"
+DINJ05_E3 "Einj RMS Var.: beam#05(D), E#3"
[VS. TIME ONLY.]

EINJ06 "Beam#06(D) Injected Energies" (eV)

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+EINJ06_E1 "Einj: beam#06(D), E-frac#1"
+EINJ06_E2 "Einj: beam#06(D), E-frac#2"
+EINJ06_E3 "Einj: beam#06(D), E-frac#3"
+DINJ06_E1 "Einj RMS Var.: beam#06(D), E#1"
+DINJ06_E2 "Einj RMS Var.: beam#06(D), E#2"
+DINJ06_E3 "Einj RMS Var.: beam#06(D), E#3"
[VS. TIME ONLY.]

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SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

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EINJAV      "avg beam voltages by species" (EV)
+EINJAV_D   "D: avg full injection energy"
[VS. TIME ONLY.]

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FBDY        "Offset from bounding point" ()
+FBDY_REF   "Offset of Prescribed Bdy"
+FBDY_FREE  "Offset of Free Bdy"
[VS. TIME ONLY.]

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FBPOL        "TRANSP POLOIDAL BETAS" ()
+BETAE      "ELECTRON BETA (POLOIDAL)"
+BETAR      "ROTATION BETA (POLOIDAL)"
+BETAI      "THERMAL ION BETA POLOIDAL"
+BPEQ       "EQUILIBRIUM BETA(POLOIDAL)"
+BPDIA      "DIAMAGNETIC BETA(POLOIDAL)"
+BPFSTPP    "TOTAL FAST ION BETA(POL) PERP"
+BPFSTPA    "TOTAL FAST ION BETA(POL) PLL"
[VS. TIME ONLY.]

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FBPOLPA     "FAST ION PLL BETA(POLOIDAL)S" ()
+BBPAR      "BEAM BETA(POLOIDAL) PLL"
+BPFSTPA    "TOTAL FAST ION BETA(POL) PLL"
[VS. TIME ONLY.]

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FBPOLPP     "FAST ION PERP BETA(POLOIDAL)S" ()
+BBPER      "BEAM BETA(POLOIDAL) PERP"
+BPFSTPP    "TOTAL FAST ION BETA(POL) PERP"
[VS. TIME ONLY.]

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HFAC        "TauE98y & TaeE97L H factors" ()
+H98Y2      "TauE98y,2 confinement Hfactor"
+H98Y2E     "TauE98y,2e confinement Hfactor"
+H97LG      "TauE97L,g confinement Hfactor"
+H97LTH     "TauE97L,th confinement Hfactor"
[VS. TIME ONLY.]

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HH          "TauE98y2 confinement ratio H factors" ()
+H98Y2      "TauE98y,2 confinement Hfactor"
+H98Y2E     "TauE98y,2e confinement Hfactor"
[VS. TIME ONLY.]

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HL          "TauE97L confinement ratio H factors" ()
+H97LG      "TauE97L,g confinement Hfactor"
+H97LTH     "TauE97L,th confinement Hfactor"

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[VS. TIME ONLY.]

IPCOMP "PLASMA CURRENT COMPARISON" (AMPS)
+PCUR "MEASURED PLASMA CURRENT"
+PCUREQ "EQ PLASMA CURRENT"
+PCURC "CALCULATED PLASMA CURRENT"
[VS. TIME ONLY.]

KP_PF1AL "Circuit Current pf1al Compare" (A)
+KK_PF1AL "Current in pf1al circuit"
[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

KP_PF1AU "Circuit Current pf1au Compare" (A)
+KK_PF1AU "Current in pf1au circuit"
[VS. TIME ONLY.]

KP_PF1CL "Circuit Current pf1cl Compare" (A)
+KK_PF1CL "Current in pf1cl circuit"
[VS. TIME ONLY.]

KP_PF1CU "Circuit Current pf1cu Compare" (A)
+KK_PF1CU "Current in pf1cu circuit"
[VS. TIME ONLY.]

KP_PF2L "Circuit Current pf2l Compare" (A)
+KK_PF2L "Current in pf2l circuit"
[VS. TIME ONLY.]

KP_PF2U "Circuit Current pf2u Compare" (A)
+KK_PF2U "Current in pf2u circuit"
[VS. TIME ONLY.]

KP_PF3L "Circuit Current pf3l Compare" (A)
+KK_PF3L "Current in pf3l circuit"
[VS. TIME ONLY.]

KP_PF3U "Circuit Current pf3u Compare" (A)
+KK_PF3U "Current in pf3u circuit"
[VS. TIME ONLY.]

KP_PF5 "Circuit Current pf5 Compare" (A)
+KK_PF5 "Current in pf5 circuit"
[VS. TIME ONLY.]

L2COM "MAGNETIC LI/2 COMPARISON" ()
+LI02M "LI/2 (MAGNETICS DATA ESTIMATE)"
+LI02C "LI/2 (COMPUTED FROM J PROFILE)"
[VS. TIME ONLY.]

LAMDA "LAMDA COMPARISON" ()
+LAMDM "MAGNETICS EST. LAMDA"
+LAMDC "KINETIC+J EST. LAMDA"

[VS. TIME ONLY.]

LBPOL "POLOIDAL BETAS, LI/2+BETA" ()
+LI02 "INDUCTANCE (LI/2)"
+LI2PB "LI/2 + BETA(POLOIDAL)"
+BPEQ "EQUILIBRIUM BETA(POLOIDAL)"
+BPEQ1 "1D EQUILIBRIUM BETA(POLOIDAL)"
+LI021 "1D DEFINITION OF LI/2"
+L2PB1 "1D DEFINITION LI/2+BETA"

[VS. TIME ONLY.]

LIHI2 "INDUCTANCE" ()
+LI02 "INDUCTANCE (LI/2)"
+HI02 "INDUCTANCE (HI/2)"
+LI021 "1D DEFINITION OF LI/2"

[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

LINORM "VARIOUS NORMALIZED INDUCTANCES" ()
+LI_1 "Inductance definition Li_1"
+LI_3 "Inductance definition Li_3"
+LI_VDIFF "Inductance: TRANSP V-diff norm."
+LIF_1 "Inductance Li_1 from Free Bdy"
+LIF_3 "Inductance Li_3 from Free Bdy"
+LIS_1 "Inductance Li_1 at separatrix"
+LIS_3 "Inductance Li_3 at separatrix"

[VS. TIME ONLY.]

MBPOL "EQ. + DIA. BETA(POLOIDAL)" ()
+BPDM "MAGNETICS EST. BETA(DIA)"
+BPDC "KINETIC BETA(DIA)"
+BPDIA "DIAMAGNETIC BETA(POLOIDAL)"
+BPDA1 "1D DIAMAGNETIC BETA(POLOIDAL)"

[VS. TIME ONLY.]

MBTOR "EQ. + DIA. BETA(TOROIDAL)" ()
+BTEQ "EQUILIBRIUM BETA(TOROIDAL)"
+BTDIA "DIAMAGNETIC BETA(TOROIDAL)"

[VS. TIME ONLY.]

MUCOM "MAGNETIC MUDIA COMPARISON" ()
+MUIM "MAGNETICS EST. MU(DIA)"
+MUIC "TRANSP EST. MU(DIA) MHD EQ"

[VS. TIME ONLY.]

NCXORB "# CX events during orbiting" (N)
+NCX0_D "# CX events D orbiting"

[VS. TIME ONLY.]

NMCLOSS "No. of prompt loss MC Ions" (N)
+NMCLOSS_D "Beam D MC Prompt Loss"

[VS. TIME ONLY.]

NMCTOT "Total No. of Monte Carlo Ions" (N)
+NMCTOT_D "Beam D Total MC Ions"
[VS. TIME ONLY.]

NNEW "# Monte Carlo Deposited" (N)
+NNEW_D "Beam D MC Deposited"
[VS. TIME ONLY.]

OM0EDGE "EDGE GAS ANGULAR VELOCITY" (RAD/SEC)
+OM0RECYC "RECYCLING GAS Ang. Veloc. (AVG)"
+OM0GASFL "GAS FLOW Ang. Veloc. (AVG)"
[VS. TIME ONLY.]

P0BLC "LAB FRAME NEUTRAL POWER BALANCE" (WATTS)
+P0FIN "NEUTRAL INFLUX POWER"
+P0RFL "NEUTRAL POWER REFLECTED IN"
+P0CXT "TOTAL CX POWER"
-P0INZ "NEUTRAL POWER IONIZED"
-P0ESC "NEUTRAL POWER ESCAPED"
-P0BAL "NEUTRAL POWER BALANCE CHECK"
[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

PBBAL "FAST ION POWER BALANCE" (WATTS)
+PINJ "BEAM POWER INJECTED"
+BPST "FAST ION POWER STORED"
+BPOH "POWER: OH CIRCUIT TO FAST IONS"
+BPCPR "POWER: COMPRESSION OF FAST IONS"
+BPBAL "FAST ION POWER BALANCE"
+BPERR "FAST ION ORBIT POWER ERROR"
[VS. TIME ONLY.]

PBBAL_D "BEAM POWER BALANCE (D)" (WATTS)
+BPST_D "D BEAM POWER STORED"
+BPOH_D "POWER: OH CIRCUIT TO D BEAM"
+PRFB_D "RF POWER -> D BEAM IONS"
+BPCPR_D "POWER: COMPRESSION OF D BEAM"
+BPBAL_D "D BEAM POWER BALANCE"
+BPERR_D "D BEAM ORBIT POWER ERROR"
+PINJ_D "TOTAL INJECTED D BEAM POWER"
[VS. TIME ONLY.]

PBCXB "FAST ION CX POWER TERMS" (WATTS)
+BPCXI "FAST ION POWER TO CX (INT)"
+BPCXX "FAST ION POWER TO CX (EXT)"
+BPCI0 "FAST ION CX SCE POWER (INT)"
+BPCX0 "FAST ION CX SCE POWER (EXT)"
+BPCRI "FAST ION CX RECAPTURE (INT)"
+BPCRX "FAST ION CX RECAPTURE (EXT)"
+BPCXE "FAST ION CX TRACKER ERROR"
[VS. TIME ONLY.]

PBCXB_D "BEAM CX POWER TERMS (D)" (WATTS)

+BPCXI_D "D BEAM POWER TO CX (INT)"
 +BPCXX_D "D BEAM POWER TO CX (EXT)"
 +BPCI0_D "D BEAM CX SCE POWER (INT)"
 +BPCX0_D "D BEAM CX SCE POWER (EXT)"
 +BPCRI_D "D BEAM CX RECAPTURE (INT)"
 +BPCR_X_D "D BEAM CX RECAPTURE (EXT)"
 +BPCXE_D "D BEAM CX TRACKER ERROR"

[VS. TIME ONLY.]

PBDEPB_D "the total D-beam injected power" (WATTS)

+PBINJ_D "DBEAM MC IONS POWER INJECTED"
 -PBDEPMC_D "DBEAM MC IONS POWER DEPOSITED"
 -PBSHINE_D "DBEAM SHINE-THRU POWER"
 -PBDEPBA_D "DBEAM POWER, BALANCE CHECK"

[VS. TIME ONLY.]

PBLOS "FAST ION POWER LOSSES" (WATTS)

+BPSHI "FAST ION SHINE-THRU POWER"
 +BPLIM "FAST ION ORBIT LOSS"
 +BPCXI "FAST ION POWER TO CX (INT)"
 +BPCXX "FAST ION POWER TO CX (EXT)"
 +BPTH "FAST ION POWER THERMALIZED"

[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

PBLOS_D "BEAM POWER LOSSES (D)" (WATTS)

+BPLIM_D "D BEAM ORBIT LOSS"
 +BPSHI_D "D BEAM SHINE-THRU POWER"
 +BPCXI_D "D BEAM POWER TO CX (INT)"
 +BPCXX_D "D BEAM POWER TO CX (EXT)"
 +BPTH_D "D BEAM POWER THERMALIZED"

[VS. TIME ONLY.]

PBROT "FAST ION POWER TO ROTATION" (WATTS)

+BPTH_S "NB PWR: TH.SCE.FRICTION"
 +BPTH_R "NB PWR: THERMALIZATION>ROTATION"
 +BPJXB "NB PWR: JXB TORQUE"
 +BPCOL "NB PWR: COLLISIONAL TORQUE"

[VS. TIME ONLY.]

PBROT_D "BEAM POWER TO ROTATION (D)" (WATTS)

+BPTH_S_D "D BEAM PWR: TH.SCE.FRICTION"
 +BPTH_R_D "D BEAM PWR: THERMALIZ>ROTATION"
 +BPJXB_D "D BEAM PWR: JXB TORQUE"
 +BPTDFB_D "D BEAM PWR: ANOM.DIFF TORQUE"
 +BPCOL_D "D BEAM PWR: COLLISIONAL TORQUE"

[VS. TIME ONLY.]

PEDGE "EXPANSION/SCRAPEOFF POWER" (WATTS)

+PEEDG "ELECTRON ENERGY VIA BDY"
 +PIEDG "ION ENERGY VIA BDY"

[VS. TIME ONLY.]

PED_NHGT "density pedestal height" (N/CM**3)
+NEPED "ELECTRON PEDESTAL DENSITY"
[VS. TIME ONLY.]

PED_SCAL "pedestal scale factors" ()
+LHMODE "H-Mode indicator"
+SC_TEPED "TE PEDESTAL HEIGHT SCALE FACTOR"
+SC_TIPED "TI PEDESTAL HEIGHT SCALE FACTOR"
+SC_NEPED "NE PEDESTAL HEIGHT SCALE FACTOR"
[VS. TIME ONLY.]

PED_THGT "temperature pedestal heights" (eV)
+TEPED "ELECTRON PEDESTAL TEMPERATURE"
+TIPED "ION PEDESTAL TEMPERATURE"
[VS. TIME ONLY.]

PED_WID "pedestal model widths" ()
+TEPEDW "ELECTRON PEDESTAL WIDTH: TE"
+TIPEDW "ION PEDESTAL WIDTH"
+NEPEDW "ELECTRON PEDESTAL WIDTH: NE"
[VS. TIME ONLY.]

PFIO "FAST ION SOURCE POWERS" (WATTS)
+PINJ_D "TOTAL INJECTED D BEAM POWER"
[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

PHEAT "HEATING POWERS" (WATTS)
+POHT "OHMIC INPUT POWER"
+BPHTO "TOTAL FAST ION HEATING"
+BPCAP "BEAM POWER CAPTURED"
+PINJ "BEAM POWER INJECTED"
[VS. TIME ONLY.]

PHEAT_IN "INPUT HEATING POWERS" (WATTS)
+PINJ "BEAM POWER INJECTED"
[VS. TIME ONLY.]

PINJB "the total/beam injected power" (WATTS)
+PINJ "BEAM POWER INJECTED"
+PINJ01 "Beam#01(D) injected power"
+PINJ02 "Beam#02(D) injected power"
+PINJ03 "Beam#03(D) injected power"
+PINJ04 "Beam#04(D) injected power"
+PINJ05 "Beam#05(D) injected power"
+PINJ06 "Beam#06(D) injected power"
[VS. TIME ONLY.]

PL2H "L-H power condition" (WATTS)
+PL2HREQ "L-H transition power"
+PL2HTOT "Total heating power"
[VS. TIME ONLY.]

PLFLXCOMP "POLOIDAL FLUX COMPARISON" (Wb/rad)
+PLFLXA "ENCLOSED POLOIDAL FLUX"
+PLFLXD "ENCLOSED POLOIDAL FLUX (data)"
[VS. TIME ONLY.]

POHC "OHMIC HEATING, IP*VS" (WATTS)
+POHT "OHMIC INPUT POWER"
+IPXVS "PCUR * VSUR"
[VS. TIME ONLY.]

PPMHD "Psi of Equilibrium Points" (Wb/rad)
+PBPMHD "PSI Boundary Point from Eq."
+PXPMHD1 "PSI of X Point 1 from Eq."
+PXPMHD2 "PSI of X Point 2 from Eq."
+PXPMHD3 "PSI of X Point 3 from Eq."
+PXPMHD4 "PSI of X Point 4 from Eq."
+PXPMHD5 "PSI of X Point 5 from Eq."
+PXPMHD6 "PSI of X Point 6 from Eq."
+PXPMHD7 "PSI of X Point 7 from Eq."
+PXPMHD8 "PSI of X Point 8 from Eq."
[VS. TIME ONLY.]

PRFFI "ICRF POWER to FAST IONS" (WATTS)
+PRFB_D "RF POWER -> D BEAM IONS"
[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

PSI0 "Poloidal flux on axis" (Wb/rad)
+PSI0_TR "Psi_poloidal(axis) in simulation"
+PSI0_DATA "Psi_poloidal(axis) input data"
+PSI0_ISO "Psi_poloidal(axis) (isolver)"
[VS. TIME ONLY.]

PVOLS "PLASMA VOLUMES" (CM**3)
+PVOL "PLASMA VOLUME"
+PVOLB "PLASMA VOLUME FROM BOUNDARY"
+PVOLF "PLASMA VOLUME FROM FLUX SURF"
[VS. TIME ONLY.]

RAXISEQ "FEQ MAGNETIC AXIS R" (CM)
+RAXISEQ "EQ MAGNETIC AXIS - R"
[VS. TIME ONLY.]

RMAJB "EQUILIBRIUM RMAJ FLUX/BOUNDARY" (CM)
+RMAJDIFF "MAX DIFF BOUND AND FLUX MIDPLANE"
+RMAJBLIM "RMAJ EXTENT OF THE BOUNDARY"
[VS. TIME ONLY.]

RPMHD "R of Equilibrium Points" (CM)
+RAXISEQ "EQ MAGNETIC AXIS - R"
+RBPMHD "R Boundary Point from Eq."
+RXPMHD1 "R of X Point 1 from Eq."
+RXPMHD2 "R of X Point 2 from Eq."

+RXPMHD3 "R of X Point 3 from Eq."
 +RXPMHD4 "R of X Point 4 from Eq."
 +RXPMHD5 "R of X Point 5 from Eq."
 +RXPMHD6 "R of X Point 6 from Eq."
 +RXPMHD7 "R of X Point 7 from Eq."
 +RXPMHD8 "R of X Point 8 from Eq."
 +RXGUESS1 "R of X Point 1 as Guessed"
 +RXGUESS2 "R of X Point 2 as Guessed"
 [VS. TIME ONLY.]

RTCOM "MAGNETIC RT COMPARISON" (CM)
 +RTPC "MAG:RT, CALCULATED"
 [VS. TIME ONLY.]

SBBAL "FAST ION PTCL BALANCE" (N/SEC)
 +SFDEP "FAST ION SCE: DEPOSITION"
 +SFRCAP "FAST ION CX RECAPTURE"
 -BSTH "FAST ION THERMALIZATIONS"
 -BSORB "FAST ION ORBIT LOSSES"
 -BSNXI "FAST ION CX SINK (INT)"
 -BSNXO "FAST ION CX SINK (EXT)"
 -BSBAL "FAST ION PTCL BALANCE"
 -BDNDT "D/DT(FAST ION POPULATION)"
 -BDNDTX "D/DT(FAST IONS OUTSIDE PLASMA)"
 [VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

SBBAL_D "BEAM PTCL BALANCE (D)" (N/SEC)
 -BDNDT_D "D/DT(D BEAM ION POPULATION)"
 -BDNDTX_D "D/DT(D BEAM IONS OUTSIDE PLASMA)"
 -BSTH_D "D BEAM THERMALIZATIONS"
 -BSORB_D "D BEAM ORBIT LOSSES"
 -BSNXI_D "D BEAM CX SINK (INT)"
 -BSNXO_D "D BEAM CX SINK (EXT)"
 -BSBAL_D "D BEAM PTCL BALANCE"
 +SBDEPSC_D "D BEAM TOTAL DEPOSITION SCE"
 +SBXRCSC_D "D BEAM TOTAL RECAPTURE SCE"
 [VS. TIME ONLY.]

SBCX0B_D "BEAM CX NEUTRAL PTCL BAL (D)" (N/SEC)
 +SBCX0MC_D "D BEAM CX NEUTRALS LAUNCHED"
 -SBCXESC_D "D BEAM CX NEUTRALS ESCAPED"
 -SBCXRR_D "D BEAM CX NEUTRALS "R.R.""
 -SBCXRMCD "D BEAM CX MC IONS RECAPTURED"
 +SBCXBAL_D "D BEAM CX NEUTRAL PTCL BAL"
 [VS. TIME ONLY.]

SBCXSN_D "BEAM ION CX SINKS (D)" (N/SEC)
 +BSNXO_D "D BEAM CX SINK (EXT)"
 +SBCX0MC_D "D BEAM CX NEUTRALS LAUNCHED"
 +SNBXTOT_D "TOTAL D BEAM ION CX SINK"
 +SNBXW0_D "D BEAM ION CX SINK: WALL NEUTS"
 +SNBXV0_D "D BEAM ION CX SINK: HALO NEUTS"

+SNBXBB0_D "D BEAM ION CX W/ BEAM NEUTS"
+SNBXBB1_D "D BEAM ION CX W/ FAST CX NEUTS"
[VS. TIME ONLY.]

SBDEPB_D "BEAM DEPOSITION PTCL BAL (D)" (N/SEC)
+SINJ_D "FAST D BEAM NEUTRALS INJECTED"
-SINJEA_D "D DEP E.CONSERVATION ADJUST"
-SBSHINE_D "D BEAM SHINE-THROUGH"
-SBDEPMC_D "D BEAM MC IONS DEPOSITED"
-SBDEPBA_D "D BEAM DEP PTCL BALANCE"
[VS. TIME ONLY.]

SBDEPS_D "BEAM DEPOSITION SOURCES (D)" (N/SEC)
+SBDEPMC_D "D BEAM MC IONS DEPOSITED"
+SBDEPSC_D "D BEAM TOTAL DEPOSITION SCE"
+SBDEPIZ_D "D BEAM DEP: TH.IONIZATION"
+SBDEPCX_D "D BEAM DEP: CX W/THERMAL IONS"
+SBDBBIZ_D "D BEAM DEP: BEAM-BEAM IONIZ."
+SBDBBCX_D "D BEAM DEP: BEAM-BEAM CX"
[VS. TIME ONLY.]

SBDYD "D0 BOUNDARY SOURCES" (N/SEC)
+GASD "D0 GAS FLOW SOURCE"
+RCYD "D0 RECYCLING SOURCE"
[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

SBDYH "H0 BOUNDARY SOURCES" (N/SEC)
+GASH "H0 GAS FLOW SOURCE"
+RCYH "H0 RECYCLING SOURCE"
[VS. TIME ONLY.]

SBORBA_D "BEAM ORBIT PTCL BAL (D)" (N/SEC)
-BSTH_D "D BEAM THERMALIZATIONS"
-BSORB_D "D BEAM ORBIT LOSSES"
+SBDEPRR_D "D BEAM DEP "RUSSIAN ROULETTE""
+SBDEPMC_D "D BEAM MC IONS DEPOSITED"
-SBCXESC_D "D BEAM CX NEUTRALS ESCAPED"
-SBCXRR_D "D BEAM CX NEUTRALS "R.R.""
-SBORBRR_D "D BEAM ORBIT CODE "R.R.""
-SBDTBMC_D "D BEAM MC RATE OF CHANGE"
+SBORBAL_D "D BEAM ORBIT PTCL BALANCE"
[VS. TIME ONLY.]

SBRCAP_D "BEAM CX RECAPTURE (D)" (N/SEC)
+SBCXRMC_D "D BEAM CX MC IONS RECAPTURED"
+SBXRCSC_D "D BEAM TOTAL RECAPTURE SCE"
+SBXRCIZ_D "D BEAM RECAP: TH.IONIZATION"
+SBXRCCX_D "D BEAM RECAP: TH.CX"
+SBRBBIZ_D "D BEAM RECAP: BEAM-BEAM IONIZ."
+SBRBBCX_D "D BEAM RECAP: BEAM-BEAM CX"
[VS. TIME ONLY.]

SDEPOAUC "orbit av. deposition, UNCONFINED" (N/SEC)
+SDEPUC_D "Beam D orbit averaged UNCONFINED"
[VS. TIME ONLY.]

SHCOM "MAGNETIC S1+S2 COMPARISON" ()
+SHFSM "MAGNETICS EST. S1+S2"
+SHFSC "CALCULATED S1+S2"
[VS. TIME ONLY.]

SUMCUR "Summed toroidal currents" (AMPS)
+PCUREQ "EQ PLASMA CURRENT"
+PCURC "CALCULATED PLASMA CURRENT"
[VS. TIME ONLY.]

SX_RANGE "solver ranges [0:x]" ()
+SX_TE "Te solver range [0:x]"
+SX_TI "Ti solver range [0:x]"
+SX_OMEGA "Ang. velocity solver range [0:x]"
+SX_NE "ne solver range [0:x]"
[VS. TIME ONLY.]

T0EDGE "EDGE GAS TEMPERATURE" (EV)
+T0RECYC "RECYCLING GAS TEMPERATURE (AVG)"
+T0GASFL "GAS FLOW TEMPERATURE (AVG)"
[VS. TIME ONLY.]

TAUH "TauE98y2 confinement scalings" (SECONDS)
+TAUE98Y2 "TauE98y,2 confinement scaling"
+TAUE98Y2E "TauE98y,2e confinement scaling"
[VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES RUN NSTX.10 142301X78 (MDS+)

TAUL "TauE97L confinement scalings" (SECONDS)
+TAUE97LG "TauE97L,g confinement scaling"
+TAUE97LTH "TauE97L,th confinement scaling"
[VS. TIME ONLY.]

TAUSCAL "TauE98y & TauE97L scalings" (SECONDS)
+TAUE98Y2 "TauE98y,2 confinement scaling"
+TAUE98Y2E "TauE98y,2e confinement scaling"
+TAUE97LG "TauE97L,g confinement scaling"
+TAUE97LTH "TauE97L,th confinement scaling"
[VS. TIME ONLY.]

TFLUXCMP "TOROIDAL FLUX COMPARISON" (WEBERS)
+TFLUX "ENCLOSED TOROIDAL FLUX"
+TRFLXD "ENCLOSED TOROIDAL FLUX (data)"
+TFLUXBDY "Equil Tor flux at boundary"
+TFLUXSEP "Equil Tor flux at separatrix"
[VS. TIME ONLY.]

TIEFAC "Ti <-> Te switching factors" ()
+FIEFAC "Ti <-> Te switching factor"

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+GIEFAC      "Ti/Te ratio when Te used for Ti"
              [VS. TIME ONLY.]

TSHF0        "SHAFRANOV & DATA SHIFT ON AXIS" (CM)
+ASHAF        "SHAFRANOV AXIS SHIFT"
+ASHAFDA      "SHAFRANOV AXIS SHIFT (MHD DATA)"
              [VS. TIME ONLY.]

VISBR        "SINGLE CHORD VB LIGHT" (VB UNITS)
+VISBC        "CHORDAL VB LIGHT (CALCULATED)"
              [VS. TIME ONLY.]

VSCMP        "SURFACE VOLTAGE COMPARISON" (VOLTS)
+VSUR         "MEAS.AVG. SURFACE VOLTAGE"
+VSURC        "CALC.AVG. SURFACE VOLTAGE"
              [VS. TIME ONLY.]

WNMCTOT      "Total Monte Carlo Weight" (#ptcls)
+WNMCTOT_D    "Beam D Total MC Ions"
              [VS. TIME ONLY.]

WXIN         "Weight of prescribed X Points" ( )
+WXGUESS1     "Weight of X Point 1 as Guessed"
+WXGUESS2     "Weight of X Point 2 as Guessed"
              [VS. TIME ONLY.]

XFUSN        "FUSION REACTION RATES" (N/SEC)
+TOTDT        "TOTAL D-T FUSION"
+TOTDDN       "TOTAL D(D,N)HE3 FUSION"
+TOT2TT       "TOTAL T(T,2N)HE4 FUSION"
+TOTDDP       "TOTAL D(D,P)T FUSION"
              [VS. TIME ONLY.]

SCALAR MULTIGRAPH PACKAGES  RUN NSTX.10 142301X78 (MDS+)

XIQ          "xi of Q surfaces" ( )
+XIQ1         "xi of Q=1 surface"
+XIQ2         "xi of Q=2 surface"
+XIQ3         "xi of Q=3 surface"
+XIQ3_2       "xi of Q=3/2 surface"
              [VS. TIME ONLY.]

XKFMG        "ION NEOCLASSICAL MULTIPLIERS" ( )
+XKFA1        "ION CHI(I) MULTIPLIER"
+XKFA2        "Q<1 ION NC CHI(I) MULTIPLIER"
              [VS. TIME ONLY.]

XMHD         "MHD MIXING REGIONS" ( )
+X_QLIM0      "maximum rho of Q=QLIM0"
              [VS. TIME ONLY.]

XNEUT        "NEUTRON EMISSION" (N/SEC)
+BTNTS        "BEAM-TARGET NEUTRONS"
+BBNTS        "BEAM-BEAM NEUTRONS"

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+NEUTX      "THERMONUCLEAR NEUTRONS"
+NEUTT      "TOTAL NEUTRONS"
[VS. TIME ONLY.]

XNEUT_DD    "DD NEUTRON EMISSION" (N/SEC)
+BBNTS_DD   "DD BEAM-BEAM NEUTRONS"
+BTNTS_DD   "DD BEAM-TARGET NEUTRONS"
+NEUTX_DD   "DD THERMONUCLEAR NEUTRONS"
[VS. TIME ONLY.]

YAXISFEQ    "FEQ MAGNETIC AXIS Y" (CM)
+YAXISEQ    "EQ MAGNETIC AXIS - Y"
[VS. TIME ONLY.]

ZEFF0       "RESIS. & COMPOSITION ZEFF @AXIS" ( )
+ZEFFM      "AXIAL MAGDIF. ZEFF"
+ZEFFC      "AXIAL PLASMA COMPOSITION ZEFF"
+ZEFFI0     "INPUT AXIAL ZEFF (UNCONSTRAINED)"
[VS. TIME ONLY.]

ZPMHD       "Z of Equilibrium Points" (CM)
+YAXISEQ    "EQ MAGNETIC AXIS - Y"
+ZBPMHD     "Z Boundary Point from Eq."
+ZXPMHD1    "Z of X Point 1 from Eq."
+ZXPMHD2    "Z of X Point 2 from Eq."
+ZXPMHD3    "Z of X Point 3 from Eq."
+ZXPMHD4    "Z of X Point 4 from Eq."
+ZXPMHD5    "Z of X Point 5 from Eq."
+ZXPMHD6    "Z of X Point 6 from Eq."
+ZXPMHD7    "Z of X Point 7 from Eq."
+ZXPMHD8    "Z of X Point 8 from Eq."
+ZXGUESS1   "Z of X Point 1 as Guessed"
+ZXGUESS2   "Z of X Point 2 as Guessed"
[VS. TIME ONLY.]

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