FT02F001

FORMAT &PLSNT ... &END / &RUNNT ... &END / 32L1

&PLSNT Name list to control Plasma processing (MIT & GSFC)

IDSRN(15) I4 Fortran I/O unit number for selective printing.
If set to 0, there is no printing. E.g. If IDSRN(11)=0, then PLSBEG detail is not written out. On the standard run, units 6, 8, and 9 are defined as output units.

variable	type	index	default	discription
IDSRN(15)	i4			Fortran unit number for output from
		1	6	Print on change of status
		2	0	KNTCUR detail
		3	0	MODCAL detail
		4	0	IDCANL detail
		5	0	CURCAL detail
		6	0	STDANL detail
		7	0	PRANAL detail
		8	0	ELANAL detail
		9	0	GETFLD detail
		10	0	BKGDCR detail
		11	6	PLSBEG detail
		12	6	VGRLOG detail
		13	0	ANSPRT after PLSANL is called.
				(a negative number indicates no format)
		14	0	ANSPRT before PLSANL is called
		15	6	ALL ERRORS

For IPR and IPQ:

First index is for cup number
Second index is 1 for low resolution (L mode)
2 for high resolution (M mode)

variable	type	default	description
IPR(4,2)	I2	(4*2,4*12)	# of channels above peak for proton moment estimate.
IPQ(4,2)	I2	(4*2,4*12)	# of channels below peak for proton moment estimate.
		For IPQF and IPRF:	
		First index is	1 for protons (fit only)
			2 for alphas (fit and moment)
		Second index is	1 for low resolution (L mode)
			2 for high resolution (M mode)
IPQF(2,2)	I2	(2,2,5,5)	# of channels above peak for fit estimates, For alphas moments estimates is same range as fits.

IPRF(2,2)	I2	(1,2,6,5)	# of channels below peak for fit estimates, For alphas moments estimates is same range as fits.
ALPHA	R4	0.01	N_α/N_p threshold to do alpha analysis
IEND	I2	4	Maximum of calls to FNCDRV
EPS	R4	0.01	Wanted fractional error in X^2
CSIG	R4	6.0	Factor to multiply CNOISE to get min current.
FSIG	R4	1.0	?
NS	I4	0	Number of spectra to be averaged together.
&END			terminates PLSNT namelist

&RUNNT Namelist to control MIT processing.

variable	type	index	default	discription
ICUNIT(10)	I2			Fortran I/O unit numbers for MIT-only functions
		1	1	Time Processing
		2	0	Input tape Dump NXTMOD
		3	6	VGRLOG Print
		4	0	VGRLOG Histograms
		5	9	OUTMOD Print (HA, DP, CN)
		6	3	GETFLD input
		7	14	CSEDR input (obsolete)
		8	15	CT or user tape output
		9	16	DP tape out
		10	17	HA tape out
		11	18	Calibration data tape

variable	type	default	description
TJUMP	R4	1.E+6	delete data if time gap exceeds time amount (in days)
FACT	R4	0.78740	
GAPSEC(20)	R4	(4*96., 4*192., 2*96., 192., 2*96., 192., 2*96., 192., 3*0)	expected time between data points for dayplot, by transmission type.
XENG ?	R4		X scale engineering plot in hr/inch.
FITMOM	A4		'MOM'
INB	I4		Number of entries in IB
IB(9)	I4		Indices of variables in DOCP VAR array that involve the B field.
NP(2)	I4		NP(ITLMOD) gives the number of entries in table IAP, IAPOFF, and ICP for mode ITLMOD

IAP(60,2)	I4		ANS(IAP(I, ITLMOD)) is the source of the data for DOCP. If IAP(I, ITLMOD) < 0 special processing is done.
ICP(60,2)	I4		VAR(ICP(I, ITLMOD)) is the destination for the data for DOCP
IAPOFF(60,2)	I4		Fill data is used by DOCP if ANS array does not have IAPOFF(I, ITLMOD) + IAP(I, ITLMOD) valid data values.
LANG(100)			True if corresponding value in VAR, proto HA array, is to be treated as an angle when taking hourly averages.
LTEST(100)			If TRUE then this value will not be averaged under certain data conditions.
NA	I4		Maximium used index in VAR array.
NUMDAY	I4		1 for day plots, ? for nday plots. Number of days on one panel.
NYRF	I4		First year to be plotted.
NDAYF	I4		First day to be plotted.
NEXD	I4		Number of days to overlap between panels.
F	I4		X axis scale factor, computed from FACT.
IDSRND	I4		
IUNIT	I4	18	Output unit for spectral tape. If greater than 20 long form is used. If .NOT.(LDMP(1) .OR. LDMP(2)) then IUNIT is set to 18 in DOCALT.
LDMP(2)	L1		Logical flags concerning dumping.
&END			terminates RUNNT namelist

For the LPLS switches, the description describes the action for the TRUE setting, even if the default is FALSE. LPLS(2)=.TRUE. implies that there will be no fit.

variable	type	default	description
LPLS(32)	L1		Logical plasma switches format(32L1)
	1	F	Overlay CR M modes (GSFC only)
	2	F	No fit (moment analysis will be done only if LPLS(4)=LPLS(31)=.FALSE.
	3	F	No transparency correction
	4	F	No analysis of data (KNTCUR, GETFLD, VOYPRT, and ANSPRT are available if LPLS(31)=LPLS(2)=.FALSE.)
	5	F	VOYPRT
	6	F	No log
	7	T	Hourly average tape
	8	F	ANSPRT only on every 31st mode (effective only if IDSRN(13) or IDSRN(14) > 0)
	9	F	No 1st Maxwellian Proton fit
	10	T	No 2nd Maxwellian Proton fit
	11	F	No 1st Maxwellian alpha fit
	12	T	No 2nd Maxwellian alpha fit
	13	T	1st proton fit anisotropic
	14	F	2nd proton fit anisotropic
	15	T	1st alpha fit anisotropic
	16	F	2nd proton fit anisotropic
	17	F	Accept Golay correction
	18	F	Accept bad data quality status word
	19	T	Do day plot
	20	F	Condensed tape (User defined tape)
	21	F	Do engineering plot
	22	F	Print engineering plot variables
	23	F	Calibration tape/Spectral tape
	24	F	Extended X^2
	25	F	Turns off the filter in KNTCUR.
	26	F	Do ODDPLT
	27	F	Reload PLCONS & logical switches from Summary tape
	28	F	SEDR tape mounted
	29	F	Transform data in main routine
	30	F	Transform data in PLSANL
	31	F	No PLSANL (as a result also turns off VOYPRT & ANSPRT from PLSANL.)
	32	F	Print digital data numbers (GSFC only)